REGION VIII
DATA VALIDATION REPORT
INORGANIC

Case No. / TDD No.	Site Name		Operable Unit
35810 / 0611-06	Lower Silver Creek		
RPM/OSC Name			
Sabrina Forrest			
Contractor Laboratory	**Contract No.**	**SDG No.**	**Laboratory DPO/Region**
ChemTech Consulting Group	EPW06047	MH1W35	

Review Assigned Date November 16, 2006
Review Completion Date November 30, 2006

Data Validator Lisa Tyson
Report Reviewer Amy Ballow

Sample ID	Matrix	Analysis
MH1W35	Water	CLP – Dissolved Metals
MH1W36		
MH1W37		
MH1W38		
MH1W39		
MH1W40		
MH1W41		
MH1W42		
MH1W43		
MH1W44		
MH1W45		
MH1W46		
MH1W47		
MH1W48		

Sample ID	Matrix	Analysis
MH1W49	Water	CLP – Dissolved Metals
MH1W50		
MH1W51		
MH1W52		
MH1W53		
MH1W54		

DATA QUALITY STATEMENT

( ) Data are ACCEPTABLE according to EPA Functional guidelines with no qualifiers (flags) added by the reviewer.
( ) Data are UNACCEPTABLE according to EPA Functional Guidelines.
(X) Data are acceptable with QUALIFICATIONS noted in review.

Telephone/Communication Logs Enclosed? Yes _____ No ___X_____

CLP Project Officer Attention Required? Yes _____ No ___X____ If yes, list the items that require attention:

INORGANIC DATA VALIDATION REPORT

REVIEW NARRATIVE SUMMARY

This data package was reviewed according to "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review," October 2004.

Raw data were reviewed for completeness and transcription accuracy onto the summary forms. Approximately 10-20% of the results reported in each of the samples, calibrations, and QC analyses were recalculated and verified. If problems were identified during the recalculation of results, a more thorough calculation check was performed.

The data package, Case No. 35810, SDG No. MH1W35, consisted of 20 water samples for CLP dissolved metals by ICP-AES (ILM05.3). The following table lists the data qualifiers added to the sample analyses. Please see Data Qualifier Definitions, attached to the end of this report.

Sample ID	Elements	Qualifiers	Reason for Qualification	Review Section
MH1W35, MH1W36, MH1W49, MH1W50, MH1W51, MH1W52, MH1W53, MH1W54	Beryllium	U	Laboratory blank contamination	7
MH1W46, MH1W49, MH1W50, MH1W53, MH1W54	Selenium			
MH1W51	Zinc			
All samples except MH1W51	Barium			
MH1W37, MH1W38, MH1W39, MH1W40, MH1W41, MH1W42, MH1W43, MH1W44, MH1W47, MH1W48, MH1W52, MH1W53, MH1W54	Potassium			
MH1W36, MH1W38, MH1W42, MH1W52	Silver			
MH1W37, MH1W38, MH1W39, MH1W40, MH1W41, MH1W42, MH1W43, MH1W44, MH1W45, MH1W46, MH1W47, MH1W48, MH1W49, MH1W50, MH1W51, MH1W52, MH1W53, MH1W54	Aluminum			
MH1W35, MH1W36, MH1W37, MH1W38, MH1W39, MH1W40, MH1W41, MH1W42, MH1W43, MH1W44, MH1W45	Antimony			
MH1W35	Thallium			

Sample ID	Elements	Qualifiers	Reason for Qualification	Review Section
MH1W35, MH1W46, MH1W47, MH1W48, MH1W49, MH1W50, MH1W51, MH1W52, MH1W53, MH1W54	Copper	U	Laboratory blank contamination	7
MH1W48, MH1W49, MH1W50, MH1W51, MH1W52, MH1W53, MH1W54	Arsenic			
MH1W38, MH1W40	Iron			
MH1W37, MH1W38, MH1W39, MH1W41, MH1W42, MH1W46, MH1W47, MH1W48, MH1W49, MH1W52, MH1W53, MH1W54	Lead	J-	Negative blank contamination	
MH1W42, MH1W47, MH1W51	Vanadium			
MH1W36, MH1W44, MH1W51	Antimony* Selenium Thallium	J-/UJ	Interference check exceeded criteria, negative interference	8
MH1W36, MH1W51	Beryllium*	J+	Interference check exceeded criteria, positive interference	
MH1W51	Cadmium			
MH1W36	Silver*			
All samples	Calcium Magnesium Manganese Potassium Sodium Zinc	J/UJ	Serial dilution %D greater than 10% and original sample value at least 50*IDL	14

* The results for antimony in samples MH1W36 and MH1W44; beryllium in samples MH1W36 and MH1W51; and silver in sample MH1W36 were not assigned bias because the results were qualified as non-detected for blank contamination.

1. DELIVERABLES

All deliverables were present as specified in the Statement of Work.

Yes_X_ No____

Comments: None.

2. HOLDING TIMES AND PRESERVATION CRITERIA

All technical holding times and preservation criteria were met.

Yes_X_ No____

Comments: The samples were analyzed within holding times and were received within the recommended temperature range of 4 ± 2°C. Chain-of-custody (COC), summary forms, and raw data were evaluated.

The sampler used the same ID for both total and dissolved metals. In accordance with previous direction from EPA Region 8, the sample IDs listed on the COC were assigned to the total metals samples and the SMO Coordinator assigned new IDs for the dissolved metals samples (i.e., the original sample number on the COC was MH1PR5 and the new dissolved sample ID was assigned as MH1W35).

3. INSTRUMENT CALIBRATIONS: STANDARDS AND BLANKS

Initial instrument calibrations were performed according to SOW requirements.

Yes_X_ No____

Comments: None.

The instruments were calibrated daily and each time an analysis run was performed.

Yes_X_ No____

Comments: None.

The instruments were calibrated using one blank and the appropriate number of standards.

Yes_X_ No____

Comments: None.

4. FORM 1 - SAMPLE ANALYSIS RESULTS

Sample analyses were entered correctly on Form Is.

Yes_X_ No____

Comments: None.

5. FORM 2A - INITIAL AND CONTINUING CALIBRATION VERIFICATION

The initial and continuing calibration verification standards (ICV and CCV, respectively) met SOW requirements.

Yes_X_ No____

Comments: None.

The calibration verification results were within 90-110% recovery for metals, 85-115% for cyanide, and 80-120% for mercury.

Yes_X_ No____

Comments: None.

The continuing calibration standards were run at 10% frequency or every two hours.

Yes_X_ No____

Comments: None.

6. FORM 2B - CRQL CHECK STANDARD

ICP Analysis: Standards (CRI) were analyzed at the beginning and end of each sample analysis run and every 20 analytical samples, immediately preceding the interferences check sample analyses, but not before ICV analysis.

Yes_X_ No____

Comments: None.

The CRI recoveries were within 70-130% (50-150% for Sb, Pb, and Tl) for required elements.

Yes_X_ No____

Comments: None.

7. FORM 3 - BLANKS

The initial and continuing calibration blanks (ICB and CCB, respectively) met SOW requirements.

Yes_X_ No____

Comments: None.

The continuing calibration blanks were run at 10% frequency.

Yes_X_ No____

Comments: Continuing calibration blanks were run every 10 samples.

A laboratory/preparation blank was run at the frequency of one per twenty samples, or per sample delivery group (whichever is more frequent), and for each matrix analyzed.

Yes_X_ No____

Comments: None.

All analyzed blanks were free of contamination.

Yes____ No_X_

Comments: The following table lists the blanks with contamination that resulted in sample qualification, elements present, affected samples, and data qualifiers:

Blank Contaminants

Blank ID	Contaminant	Concentration Found in Blank (ug/L)	Associated Samples	Concentration Found in Sample (ug/L)	Qualifier/ Adjustment
PB	Beryllium	0.1	MH1W35 MH1W36 MH1W49 MH1W50 MH1W51 MH1W52 MH1W53 MH1W54	<CRQL	5.0 U

Blank ID	Contaminant	Concentration Found in Blank (ug/L)	Associated Samples	Concentration Found in Sample (ug/L)	Qualifier/ Adjustment
PB	Selenium	6.665	MH1W46 MH1W49 MH1W50 MH1W53 MH1W54	<CRQL	35.0 U
CCB12	Zinc	1.7	MH1W51		60.0 U
ICB	Barium	0.685	All samples except MH1W51		200 U
CCB12 CCB14	Potassium	23.67 21.38	MH1W37 MH1W38 MH1W39 MH1W40 MH1W41 MH1W42 MH1W43 MH1W44 MH1W47 MH1W48 MH1W52 MH1W53 MH1W54		5000 U
ICB	Silver	2.015	MH1W36 MH1W38 MH1W42 MH1W52		10.0 U
CCB11 CCB13 CCB14	Aluminum	12.85 7.68 17.38	MH1W37 MH1W38 MH1W39 MH1W40 MH1W41 MH1W42 MH1W43 MH1W44 MH1W45 MH1W46 MH1W47 MH1W48 MH1W49 MH1W50 MH1W51 MH1W52 MH1W53 MH1W54		200 U
CCB11	Antimony	14.005	MH1W35 MH1W36 MH1W37 MH1W38 MH1W39 MH1W40 MH1W41 MH1W42 MH1W43 MH1W44 MH1W45		60.0 U
CCB10	Thallium	6.755	MH1W35		25.0 U

Blank ID	Contaminant	Concentration Found in Blank (ug/L)	Associated Samples	Concentration Found in Sample (ug/L)	Qualifier/ Adjustment
CCB10 CCB13	Copper	0.88 1.255	MH1W35 MH1W46 MH1W47 MH1W48 MH1W49 MH1W50 MH1W51 MH1W52 MH1W53 MH1W54	<CRQL	25.0 U
CCB13	Arsenic	5.815	MH1W48 MH1W49 MH1W50 MH1W51 MH1W52 MH1W53 MH1W54	<CRQL <CRQL 10.1 10.9 11.7 12.4 12.8	10.0 U 10.0 U U U U U U
CCB11	Iron	23.86	MH1W38 MH1W40	111 <CRQL	U 100 U
PB	Lead	-2.895	MH1W37 MH1W38 MH1W39 MH1W41 MH1W42 MH1W46 MH1W47 MH1W48 MH1W49 MH1W52 MH1W53 MH1W54	<CRQL <CRQL <CRQL <CRQL <CRQL 14.475 <CRQL <CRQL <CRQL <CRQL <CRQL <CRQL	J-
PB	Vanadium	-0.475	MH1W42 MH1W47 MH1W51	<CRQL	J-

8. FORM 4 - ICP INTERFERENCE CHECK SAMPLE

The ICP interference check sample (ICS) was run at the beginning and end of each sample analysis run and every 20 analytical samples, but not prior to the ICV.

Yes_X_ No____

Comments: None.

Percent recovery of the analytes in the ICS solutions were within the range of 80-120% or the result was within ±2x the CRQL.

Yes_X_ No____

Comments: None.

Sample results for aluminum, calcium, iron, and magnesium were less than the ICSA values.

Yes___ No_X_

Comments: The following sample results were qualified because the results for calcium were greater than the ICSA values and the absolute values of the associated elements were greater than the MDL in the ICSA analysis:

Element	ICSA Result (ug/L)	MDL (ug/L)	Samples Affected	Qualifiers
Antimony	-6.3	2.8	MH1W36, MH1W44, MH1W51	J-/UJ
Selenium	-5.4	4.7		
Thallium	-12.3	6.7		
Beryllium	0.51	0.063	MH1W36, MH1W51	J+
Cadmium	1.2	0.50	MH1W51	
Silver	4.2	1.1	MH1W36	

The results for antimony in samples MH1W36 and MH1W44; beryllium in samples MH1W36 and MH1W51; and silver in sample MH1W36 were not assigned bias because the results were qualified as non-detected for blank contamination.

9. FORM 5A - MATRIX SPIKE SAMPLE ANALYSIS

A matrix spike sample was analyzed with every twenty or fewer samples of a similar matrix, or one per sample delivery group (whichever is more frequent).

Yes_X_ No___ NA___

Comments: None.

The percent recoveries (%Rs) were calculated correctly.

Yes_X_ No___ NA___

Comments: None.

Spike recoveries were within the range of 75-125% (an exception is granted where the sample concentration is four times the spike concentration).

Yes_X_ No___

Comments: None.

10. FORM 5B - POST DIGEST SPIKE RECOVERY

A post-digest spike was performed for those elements that did not meet the specified criteria (i.e., Pre-digestion/pre-distillation spike recovery falls outside of control limits and sample result is less than four times the spike amount added, exception: Ag, Hg).

Yes___ No___ NA_X_

Comments: None.

11. FORM 6 - DUPLICATE SAMPLE ANALYSIS

Duplicate sample analysis was performed with every twenty or fewer samples of a similar matrix, or one per sample delivery group (whichever is more frequent).

Yes_X_ No___ NA___

Comments: None.

The RPDs were calculated correctly.

Yes_X_ No___ NA___

Comments: None.

For sample concentrations greater than five times the CRQL, RPDs were within ±20% (limits of ±35% apply for soil/sediments/tailings samples).

Yes_X_ No___ NA___

Comments: None.

For sample concentrations less than five times the CRQL, duplicate analysis results were within the control window of ± CRQL (two times CRQL for soils).

Yes_X_ No___ NA___

Comments: None.

12. ICP-MS

Comments: ICP-MS analyses were not performed on these samples.

13. FORM 7 - LABORATORY CONTROL SAMPLE

The laboratory control sample (LCS) was prepared and analyzed with every twenty or fewer samples of a similar matrix, or one per sample delivery group (whichever is more frequent).

Yes_X_ No____

Comments: None.

All results were within control limits.

Yes_X_ No____

Comments: Results were within laboratory control limits.

14. FORM 8 - ICP-AES QC

A serial dilution was performed for ICP analysis with every twenty or fewer samples of a similar matrix, or one per sample delivery group, whichever is more frequent.

Yes_X_ No____

Comments: None.

The serial dilution was without interference problems as defined by the SOW.

Yes____ No_X_

Comments: The following serial dilution %Ds were greater than 10% and the original sample result was at least 50* the MDL:

Element	% Difference	Samples Affected	Qualifiers
Calcium	12%	All samples	J/UJ
Magnesium	11%		
Manganese	11%		
Potassium	14%		
Sodium	33%		
Zinc	36%		

15. FORM 9 - ANNUAL METHOD DETECTION LIMITS (MDL)

MDLs were provided for all elements on the target analyte list.

Yes_X_ No____

Comments: None.

Reported MDLs met SOW requirements.

Yes_X_ No____

Comments: None.

16. FORM 10 - INTERELEMENT CORRECTION FACTORS FOR ICP

Interelement corrections for ICP were reported.

Yes_X_ No____

Comments: None.

17. FORM 11 - ICP LINEAR RANGES

ICP linear ranges were reported.

Yes_X_ No____

Comments: None.

18. FORM 12 - PREPARATION LOG

Information on the preparation of samples for analysis was reported on Form 12.

Yes_X_ No____

Comments: None.

19. FORM 13 - ANALYSIS RUN LOG

A Form 13 with the required information was filled out for each analysis run in the data package.

Yes_X_ No____

Comments: None.

20. Additional Comments or Problems/Resolutions Not Addressed Above

Yes___ No_X_

Comments: None.

INORGANIC DATA QUALITY ASSURANCE REVIEW

Region VIII

DATA QUALIFIER DEFINITIONS

For the purpose of Data Validation, the following code letters and associated definitions are provided for use by the data validator to summarize the data quality. Use of additional qualifiers should be carefully considered. Definitions for all qualifiers used should be provided with each report.

GENERAL QUALIFIERS for use with both INORGANIC and ORGANIC DATA

R - Reported value is "rejected." The data are unusable. Resampling or reanalysis may be necessary to verify the presence or absence of the compound.

J - The associated numerical value is an estimated quantity and is the approximate concentration of the analyte in the sample.

J+ - The associated numerical value is an estimated quantity but the result may be biased high.

J- - The associated numerical value is an estimated quantity but the result may be biased low.

U J - The reported quantitation limit is estimated because Quality Control criteria were not met. Element or compound may or may not be present in the sample.

N J - Estimated value of a tentatively identified compound. (Identified with a CAS number.) ORGANICS analysis only.

U - The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

ACRONYMS

AA	Atomic Absorption
Ag	Silver
CCB	Continuing Calibration Blank
CCV	Continuing Calibration Verification
CFR	Code of Federal Regulations
CLP	Contract Laboratory Program
CRA	CRQL standard required for AA
CRQL	Contract Required Quantitation Limit
CRI	CRQL standard required for ICP
CV	Cold Vapor
EPA	U.S. Environmental Protection Agency
GFAA	Graphite Furnace Atomic Absorption
Hg	Mercury
ICB	Initial Calibration Blank
ICP	Inductively Coupled Plasma
ICS	Interference Check Sample
ICSA	Interference Check Sample (Solution A)
ICSAB	Interference Check Sample (Solution AB)
ICV	Initial Calibration Verification
LCS	Laboratory Control Sample
LRA	Linear Range Verification Analysis
MDL	Method Detection Limit
PDS	Post Digestion Spike
QC	Quality Control
RPD	Relative Percent Difference
RPM	Regional Project Manager
RSD	Percent Relative Standard Deviation
SA	Spike Added
SAS	Special Analytical Services
SDG	Sample Delivery Group
SOW	Statement of Work
SR	Sample Result
SSR	Spiked Sample Result

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1W35

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1W35

Matrix: (soil/water) WATER Lab Sample ID: X4831-01

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	200	U		P	
7440-36-0	Antimony	3.1	J		P	60.0 J
7440-38-2	Arsenic	19.3			P	
7440-39-3	Barium	23.5	J		P	200 U
7440-41-7	Beryllium	0.17	J		P	5.0 U
7440-43-9	Cadmium	2.5	J		P	
7440-70-2	Calcium	221000		E	P	J
7440-47-3	Chromium	2.0	J		P	
7440-48-4	Cobalt	50.0	U		P	
7440-50-8	Copper	5.3	J		P	25.0 U
7439-89-6	Iron	326			P	
7439-92-1	Lead	10.0	U		P	
7439-95-4	Magnesium	57200		E	P	J
7439-96-5	Manganese	506		E	P	J
7439-97-6	Mercury				NR	
7440-02-0	Nickel	2.6	J		P	
7440-09-7	Potassium	5160		E	P	J
7782-49-2	Selenium	35.0	U		P	
7440-22-4	Silver	10.0	U		P	
7440-23-5	Sodium	95100		E	P	J
7440-28-0	Thallium	6.9	J		P	25.0 U
7440-62-2	Vanadium	50.0	U		P	
7440-66-6	Zinc	1010		E	P	J
57-12-5	Cyanide				NR	

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

VT 4/27/06

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1W36

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1W35

Matrix: (soil/water) WATER Lab Sample ID: X4831-02

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 0.0

Concentration Units (**ug/L** or **mg/kg** dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	1350			P	
7440-36-0	Antimony	17.6	J		P	60.0UJ
7440-38-2	Arsenic	32.1			P	
7440-39-3	Barium	33.4	J		P	200UJ
7440-41-7	Beryllium	0.57	J		P	5.0UJ
7440-43-9	Cadmium	156			P	
7440-70-2	Calcium	302000		E	P	J
7440-47-3	Chromium	4.9	J		P	
7440-48-4	Cobalt	49.2	J		P	
7440-50-8	Copper	203			P	
7439-89-6	Iron	21200			P	
7439-92-1	Lead	1120			P	
7439-95-4	Magnesium	46400		E	P	J
7439-96-5	Manganese	1930		E	P	J
7439-97-6	Mercury				NR	
7440-02-0	Nickel	65.4			P	
7440-09-7	Potassium	11100		E	P	J
7782-49-2	Selenium	35.0	U		P	UJ
7440-22-4	Silver	2.7	J		P	10.0UJ
7440-23-5	Sodium	36700		E	P	J
7440-28-0	Thallium	25.0	U		P	UJ
7440-62-2	Vanadium	50.0	U		P	
7440-66-6	Zinc	42900		E	P	J
57-12-5	Cyanide				NR	

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

UT 11/27/06

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1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1W37

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1W35

Matrix: (soil/water) WATER Lab Sample ID: X4831-03

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	33.3	J		P	200U
7440-36-0	Antimony	34.8	J		P	60.0U
7440-38-2	Arsenic	7.1	J		P	
7440-39-3	Barium	49.8	J		P	200U
7440-41-7	Beryllium	5.0	U		P	
7440-43-9	Cadmium	7.5			P	
7440-70-2	Calcium	208000		E	P	J
7440-47-3	Chromium	7.3	J		P	
7440-48-4	Cobalt	1.2	J		P	
7440-50-8	Copper	11.9	J		P	
7439-89-6	Iron	284			P	
7439-92-1	Lead	5.1	J		P	J-
7439-95-4	Magnesium	50000		E	P	J
7439-96-5	Manganese	153		E	P	J
7439-97-6	Mercury				NR	
7440-02-0	Nickel	6.9	J		P	
7440-09-7	Potassium	3790	J	E	P	5000U J
7782-49-2	Selenium	35.0	U		P	
7440-22-4	Silver	10.0	U		P	
7440-23-5	Sodium	85700		E	P	J
7440-28-0	Thallium	25.0	U		P	
7440-62-2	Vanadium	50.0	U		P	
7440-66-6	Zinc	2360		E	P	J
57-12-5	Cyanide				NR	

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

LT 11/27/06

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1W38

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1W35

Matrix: (soil/water) WATER Lab Sample ID: X4831-04

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 0.0

Concentration Units (**ug/L** or **mg/kg** dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	18.9	J		P	200U
7440-36-0	Antimony	34.5	J		P	60.0U
7440-38-2	Arsenic	8.0	J		P	
7440-39-3	Barium	45.3	J		P	200U
7440-41-7	Beryllium	5.0	U		P	
7440-43-9	Cadmium	6.9			P	
7440-70-2	Calcium	188000		E	P	J
7440-47-3	Chromium	7.0	J		P	
7440-48-4	Cobalt	1.2	J		P	
7440-50-8	Copper	11.0	J		P	
7439-89-6	Iron	111			P	U
7439-92-1	Lead	3.6	J		P	J-
7439-95-4	Magnesium	45100		E	P	J
7439-96-5	Manganese	128		E	P	J
7439-97-6	Mercury				NR	
7440-02-0	Nickel	5.0	J		P	
7440-09-7	Potassium	3250	J	E	P	5000UJ
7782-49-2	Selenium	35.0	U		P	
7440-22-4	Silver	1.3	J		P	10.0U
7440-23-5	Sodium	78400		E	P	J
7440-28-0	Thallium	25.0	U		P	
7440-62-2	Vanadium	50.0	U		P	
7440-66-6	Zinc	2110		E	P	J
57-12-5	Cyanide				NR	

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

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11/27/06

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1W39

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1W35

Matrix: (soil/water) WATER Lab Sample ID: X4831-05

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 0.0

Concentration Units (**ug/L** or **mg/kg** dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	23.2	J		P	200J
7440-36-0	Antimony	9.7	J		P	60.0J
7440-38-2	Arsenic	10.0	U		P	
7440-39-3	Barium	50.1	J		P	200J
7440-41-7	Beryllium	5.0	U		P	
7440-43-9	Cadmium	5.0	U		P	
7440-70-2	Calcium	161000		E	P	J
7440-47-3	Chromium	20.7			P	
7440-48-4	Cobalt	50.0	U		P	
7440-50-8	Copper	7.3	J		P	
7439-89-6	Iron	236			P	
7439-92-1	Lead	3.8	J		P	J
7439-95-4	Magnesium	39000		E	P	J
7439-96-5	Manganese	51.5		E	P	J
7439-97-6	Mercury				NR	
7440-02-0	Nickel	7.0	J		P	
7440-09-7	Potassium	3390	J	E	P	5000J
7782-49-2	Selenium	35.0	U		P	
7440-22-4	Silver	10.0	U		P	
7440-23-5	Sodium	74900		E	P	J
7440-28-0	Thallium	25.0	U		P	
7440-62-2	Vanadium	50.0	U		P	
7440-66-6	Zinc	318		E	P	J
57-12-5	Cyanide				NR	

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

11/27/06

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1W40

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1W35

Matrix: (soil/water) WATER Lab Sample ID: X4831-06

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 0.0

Concentration Units (**ug/L** or **mg/kg** dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	25.7	J		P	200 U
7440-36-0	Antimony	19.9	J		P	60 U
7440-38-2	Arsenic	10.0	U		P	
7440-39-3	Barium	51.5	J		P	200 U
7440-41-7	Beryllium	5.0	U		P	
7440-43-9	Cadmium	2.4	J		P	
7440-70-2	Calcium	171000		E	P	J
7440-47-3	Chromium	5.4	J		P	
7440-48-4	Cobalt	50.0	U		P	
7440-50-8	Copper	7.6	J		P	
7439-89-6	Iron	85.0	J		P	100 U
7439-92-1	Lead	10.0	U		P	
7439-95-4	Magnesium	41500		E	P	J
7439-96-5	Manganese	85.1		E	P	J
7439-97-6	Mercury				NR	
7440-02-0	Nickel	3.9	J		P	
7440-09-7	Potassium	3490	J	E	P	5000 UJ
7782-49-2	Selenium	35.0	U		P	
7440-22-4	Silver	10.0	U		P	
7440-23-5	Sodium	77800		E	P	J
7440-28-0	Thallium	25.0	U		P	
7440-62-2	Vanadium	50.0	U		P	
7440-66-6	Zinc	373		E	P	J
57-12-5	Cyanide				NR	

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

JT 11/27/06

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1W41

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1W35

Matrix: (soil/water) WATER Lab Sample ID: X4831-07

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 0.0

Concentration Units (**ug/L** or **mg/kg** dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	28.3	J		P	200J
7440-36-0	Antimony	47.0	J		P	60.0J
7440-38-2	Arsenic	6.4	J		P	
7440-39-3	Barium	46.5	J		P	200J
7440-41-7	Beryllium	5.0	U		P	
7440-43-9	Cadmium	11.6			P	
7440-70-2	Calcium	210000		E	P	J
7440-47-3	Chromium	3.1	J		P	
7440-48-4	Cobalt	2.2	J		P	
7440-50-8	Copper	8.8	J		P	
7439-89-6	Iron	160			P	
7439-92-1	Lead	3.7	J		P	J-
7439-95-4	Magnesium	50100		E	P	J
7439-96-5	Manganese	147		E	P	J
7439-97-6	Mercury				NR	
7440-02-0	Nickel	4.6	J		P	
7440-09-7	Potassium	3530	J	E	P	5000J
7782-49-2	Selenium	35.0	U		P	
7440-22-4	Silver	10.0	U		P	
7440-23-5	Sodium	84400		E	P	J
7440-28-0	Thallium	25.0	U		P	
7440-62-2	Vanadium	50.0	U		P	
7440-66-6	Zinc	2700		E	P	J
57-12-5	Cyanide				NR	

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

11/27/06

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1W42

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1W35

Matrix: (soil/water) WATER Lab Sample ID: X4831-08

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 0.0

Concentration Units (**ug/L** or **mg/kg** dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	40.5	J		P	200 J
7440-36-0	Antimony	33.0	J		P	60.0 J
7440-38-2	Arsenic	11.9			P	
7440-39-3	Barium	46.1	J		P	200 J
7440-41-7	Beryllium	5.0	U		P	
7440-43-9	Cadmium	4.0	J		P	
7440-70-2	Calcium	226000		E	P	J
7440-47-3	Chromium	71.4			P	
7440-48-4	Cobalt	1.7	J		P	
7440-50-8	Copper	10.0	J		P	
7439-89-6	Iron	298			P	
7439-92-1	Lead	2.6	J		P	J-
7439-95-4	Magnesium	53800		E	P	J
7439-96-5	Manganese	141		E	P	J
7439-97-6	Mercury				NR	
7440-02-0	Nickel	7.1	J		P	
7440-09-7	Potassium	2870	J	E	P	5000 J J
7782-49-2	Selenium	35.0	U		P	
7440-22-4	Silver	1.3	J		P	10.0 J
7440-23-5	Sodium	82600		E	P	J
7440-28-0	Thallium	25.0	U		P	
7440-62-2	Vanadium	0.48	J		P	J-
7440-66-6	Zinc	1380		E	P	J
57-12-5	Cyanide				NR	

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

JT 11/27/06

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1W43

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1W35

Matrix: (soil/water) WATER Lab Sample ID: X4831-09

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 0.0

Concentration Units (**ug/L** or **mg/kg** dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	21.2	J		P	2000
7440-36-0	Antimony	35.6	J		P	60.0
7440-38-2	Arsenic	10.0	U		P	
7440-39-3	Barium	46.0	J		P	200
7440-41-7	Beryllium	5.0	U		P	
7440-43-9	Cadmium	4.4	J		P	
7440-70-2	Calcium	228000		E	P	J
7440-47-3	Chromium	5.1	J		P	
7440-48-4	Cobalt	1.2	J		P	
7440-50-8	Copper	7.4	J		P	
7439-89-6	Iron	120			P	
7439-92-1	Lead	10.0	U		P	
7439-95-4	Magnesium	55600		E	P	J
7439-96-5	Manganese	170		E	P	J
7439-97-6	Mercury				NR	
7440-02-0	Nickel	4.7	J		P	
7440-09-7	Potassium	3320	J	E	P	5000 J
7782-49-2	Selenium	35.0	U		P	
7440-22-4	Silver	10.0	U		P	
7440-23-5	Sodium	89600		E	P	J
7440-28-0	Thallium	25.0	U		P	
7440-62-2	Vanadium	50.0	U		P	
7440-66-6	Zinc	1680		E	P	J
57-12-5	Cyanide				NR	

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

J 11/27/06

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1W44

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1W35

Matrix: (soil/water) WATER Lab Sample ID: X4831-10

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 0.0

Concentration Units (**ug/L** or **mg/kg** dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	34.2	J		P	200
7440-36-0	Antimony	5.0	J		P	60.0 J
7440-38-2	Arsenic	10.0	U		P	
7440-39-3	Barium	65.0	J		P	200
7440-41-7	Beryllium	5.0	U		P	
7440-43-9	Cadmium	5.0	U		P	
7440-70-2	Calcium	296000		E	P	J
7440-47-3	Chromium	4.3	J		P	
7440-48-4	Cobalt	50.0	U		P	
7440-50-8	Copper	3.6	J		P	
7439-89-6	Iron	267			P	
7439-92-1	Lead	10.0	U		P	
7439-95-4	Magnesium	64300		E	P	J
7439-96-5	Manganese	589		E	P	J
7439-97-6	Mercury				NR	
7440-02-0	Nickel	5.4	J		P	
7440-09-7	Potassium	1350	J	E	P	5000 J
7782-49-2	Selenium	35.0	U		P	UJ
7440-22-4	Silver	10.0	U		P	
7440-23-5	Sodium	76900		E	P	J
7440-28-0	Thallium	25.0	U		P	UJ
7440-62-2	Vanadium	50.0	U		P	
7440-66-6	Zinc	138		E	P	J
57-12-5	Cyanide				NR	

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

11/27/06

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1W45

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1W35

Matrix: (soil/water) WATER Lab Sample ID: X4831-11

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 0.0

Concentration Units (**ug/L** or **mg/kg** dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	16.6	J		P	200 J
7440-36-0	Antimony	31.4	J		P	60.0 J
7440-38-2	Arsenic	6.3	J		P	
7440-39-3	Barium	40.9	J		P	200 J
7440-41-7	Beryllium	5.0	U		P	
7440-43-9	Cadmium	8.0			P	
7440-70-2	Calcium	227000		E	P	J
7440-47-3	Chromium	20.2			P	
7440-48-4	Cobalt	1.5	J		P	
7440-50-8	Copper	11.9	J		P	
7439-89-6	Iron	333			P	
7439-92-1	Lead	16.1			P	
7439-95-4	Magnesium	56000		E	P	J
7439-96-5	Manganese	255		E	P	J
7439-97-6	Mercury				NR	
7440-02-0	Nickel	8.5	J		P	
7440-09-7	Potassium	6010		E	P	J
7782-49-2	Selenium	35.0	U		P	
7440-22-4	Silver	10.0	U		P	
7440-23-5	Sodium	82400		E	P	J
7440-28-0	Thallium	25.0	U		P	
7440-62-2	Vanadium	50.0	U		P	
7440-66-6	Zinc	2460		E	P	J
57-12-5	Cyanide				NR	

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

LT 11/07/06

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1W46

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1W35

Matrix: (soil/water) WATER Lab Sample ID: X4831-12

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 0.0

Concentration Units (**ug/L** or **mg/kg** dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	30.6	J		P	200 U
7440-36-0	Antimony	34.0	J		P	
7440-38-2	Arsenic	10.0	U		P	
7440-39-3	Barium	37.4	J		P	200 U
7440-41-7	Beryllium	5.0	U		P	
7440-43-9	Cadmium	7.9			P	
7440-70-2	Calcium	201000		E	P	J
7440-47-3	Chromium	1.9	J		P	
7440-48-4	Cobalt	2.0	J		P	
7440-50-8	Copper	11.0	J		P	25.0 U
7439-89-6	Iron	170			P	
7439-92-1	Lead	10.4			P	J-
7439-95-4	Magnesium	49600		E	P	J
7439-96-5	Manganese	80.8		E	P	J
7439-97-6	Mercury				NR	
7440-02-0	Nickel	1.7	J		P	
7440-09-7	Potassium	6480		E	P	J
7782-49-2	Selenium	5.9	J		P	35.0 U
7440-22-4	Silver	10.0	U		P	
7440-23-5	Sodium	73300		E	P	J
7440-28-0	Thallium	25.0	U		P	
7440-62-2	Vanadium	50.0	U		P	
7440-66-6	Zinc	2060		E	P	J
57-12-5	Cyanide				NR	

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

LT 11/27/06

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1W47

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1W35

Matrix: (soil/water) WATER Lab Sample ID: X4831-13

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 0.0

Concentration Units (**ug/L** or **mg/kg** dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	24.0	J		P	200U
7440-36-0	Antimony	13.2	J		P	
7440-38-2	Arsenic	10.0	U		P	
7440-39-3	Barium	44.1	J		P	200U
7440-41-7	Beryllium	5.0	U		P	
7440-43-9	Cadmium	2.8	J		P	
7440-70-2	Calcium	138000		E	P	J
7440-47-3	Chromium	11.6			P	
7440-48-4	Cobalt	1.2	J		P	
7440-50-8	Copper	8.5	J		P	25U
7439-89-6	Iron	151			P	
7439-92-1	Lead	2.5	J		P	J-
7439-95-4	Magnesium	34600		E	P	J
7439-96-5	Manganese	60.3		E	P	J
7439-97-6	Mercury				NR	
7440-02-0	Nickel	8.1	J		P	
7440-09-7	Potassium	3380	J	E	P	5000UJ
7782-49-2	Selenium	35.0	U		P	
7440-22-4	Silver	10.0	U		P	
7440-23-5	Sodium	49900		E	P	J
7440-28-0	Thallium	25.0	U		P	
7440-62-2	Vanadium	0.84	J		P	J-
7440-66-6	Zinc	1310		E	P	J
57-12-5	Cyanide				NR	

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

11/07/06

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1W48

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1W35

Matrix: (soil/water) WATER Lab Sample ID: X4831-14

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 0.0

Concentration Units (**ug/L** or **mg/kg** dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	26.9	J		P	200 J
7440-36-0	Antimony	19.1	J		P	
7440-38-2	Arsenic	8.4	J		P	10.0 J
7440-39-3	Barium	57.5	J		P	200 J
7440-41-7	Beryllium	5.0	U		P	
7440-43-9	Cadmium	5.0	U		P	
7440-70-2	Calcium	143000		E	P	J
7440-47-3	Chromium	2.3	J		P	
7440-48-4	Cobalt	50.0	U		P	
7440-50-8	Copper	16.6	J		P	25.0 J
7439-89-6	Iron	355			P	
7439-92-1	Lead	5.9	J		P	J
7439-95-4	Magnesium	34600		E	P	J
7439-96-5	Manganese	190		E	P	J
7439-97-6	Mercury				NR	
7440-02-0	Nickel	2.8	J		P	
7440-09-7	Potassium	3060	J	E	P	5000 J
7782-49-2	Selenium	35.0	U		P	
7440-22-4	Silver	10.0	U		P	
7440-23-5	Sodium	60400		E	P	J
7440-28-0	Thallium	25.0	U		P	
7440-62-2	Vanadium	50.0	U		P	
7440-66-6	Zinc	469		E	P	J
57-12-5	Cyanide				NR	

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

LT 11/17/06

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1W49

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1W35

Matrix: (soil/water) WATER Lab Sample ID: X4831-15

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 0.0

Concentration Units (**ug/L** or **mg/kg** dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	33.4	J		P	200 U
7440-36-0	Antimony	32.2	J		P	
7440-38-2	Arsenic	8.5	J		P	10.0 U
7440-39-3	Barium	49.7	J		P	200 U
7440-41-7	Beryllium	0.090	J		P	5.0 U
7440-43-9	Cadmium	16.3			P	
7440-70-2	Calcium	199000		E	P	J
7440-47-3	Chromium	35.0			P	
7440-48-4	Cobalt	1.8	J		P	
7440-50-8	Copper	21.7	J		P	25.0 U
7439-89-6	Iron	294			P	
7439-92-1	Lead	5.5	J		P	J
7439-95-4	Magnesium	47900		E	P	J
7439-96-5	Manganese	485		E	P	J
7439-97-6	Mercury				NR	
7440-02-0	Nickel	17.8	J		P	
7440-09-7	Potassium	6600		E	P	J
7782-49-2	Selenium	13.6	J		P	35.0 U
7440-22-4	Silver	10.0	U		P	
7440-23-5	Sodium	119000		E	P	J
7440-28-0	Thallium	25.0	U		P	
7440-62-2	Vanadium	50.0	U		P	
7440-66-6	Zinc	2370		E	P	J
57-12-5	Cyanide				NR	

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

VT 11/03/06

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1W50

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1W35

Matrix: (soil/water) WATER Lab Sample ID: X4831-16

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 0.0

Concentration Units (**ug/L** or **mg/kg** dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	10.8	J		P	200 U
7440-36-0	Antimony	10.1	J		P	
7440-38-2	Arsenic	10.1			P	U
7440-39-3	Barium	40.8	J		P	200 U
7440-41-7	Beryllium	0.13	J		P	5.0 U
7440-43-9	Cadmium	9.6			P	
7440-70-2	Calcium	176000		E	P	J
7440-47-3	Chromium	15.2			P	
7440-48-4	Cobalt	6.2	J		P	
7440-50-8	Copper	8.8	J		P	25.0 U
7439-89-6	Iron	240			P	
7439-92-1	Lead	10.0	U		P	
7439-95-4	Magnesium	43300		E	P	J
7439-96-5	Manganese	670		E	P	J
7439-97-6	Mercury				NR	
7440-02-0	Nickel	18.3	J		P	
7440-09-7	Potassium	5890		E	P	J
7782-49-2	Selenium	19.4	J		P	35.0 U
7440-22-4	Silver	10.0	U		P	
7440-23-5	Sodium	117000		E	P	J
7440-28-0	Thallium	25.0	U		P	
7440-62-2	Vanadium	50.0	U		P	
7440-66-6	Zinc	2210		E	P	J
57-12-5	Cyanide				NR	

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

11/8/06

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1W51

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1W35

Matrix: (soil/water) WATER Lab Sample ID: X4831-17

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 0.0

Concentration Units (**ug/L** or **mg/kg** dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	26.6	J		P	200 U
7440-36-0	Antimony	5.2	J		P	J-
7440-38-2	Arsenic	10.9			P	U
7440-39-3	Barium	562			P	
7440-41-7	Beryllium	0.065	J		P	5.0 U J
7440-43-9	Cadmium	3.1	J		P	J+
7440-70-2	Calcium	261000		E	P	J
7440-47-3	Chromium	2.5	J		P	
7440-48-4	Cobalt	50.0	U		P	
7440-50-8	Copper	6.6	J		P	25.0 U
7439-89-6	Iron	49.6	J		P	
7439-92-1	Lead	15.8			P	
7439-95-4	Magnesium	72200		E	P	J
7439-96-5	Manganese	477		E	P	J
7439-97-6	Mercury				NR	
7440-02-0	Nickel	3.8	J		P	
7440-09-7	Potassium	19000		E	P	J
7782-49-2	Selenium	35.0	U		P	UJ
7440-22-4	Silver	10.0	U		P	
7440-23-5	Sodium	146000		E	P	J
7440-28-0	Thallium	25.0	U		P	UJ
7440-62-2	Vanadium	2.0	J		P	J-
7440-66-6	Zinc	55.1	J	E	P	60.0 UJ
57-12-5	Cyanide				NR	

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

_____

_____

_____

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JT 11/07/06

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1W52

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1W35

Matrix: (soil/water) WATER Lab Sample ID: X4831-20

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 0.0

Concentration Units (**ug/L** or **mg/kg** dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	20.4	J		P	200U
7440-36-0	Antimony	6.1	J		P	
7440-38-2	Arsenic	11.7			P	U
7440-39-3	Barium	60.7	J		P	200U
7440-41-7	Beryllium	0.14	J		P	5.0U
7440-43-9	Cadmium	1.1	J		P	
7440-70-2	Calcium	142000		E	P	J
7440-47-3	Chromium	10.6			P	
7440-48-4	Cobalt	50.0	U		P	
7440-50-8	Copper	6.1	J		P	25.0U
7439-89-6	Iron	149			P	
7439-92-1	Lead	6.3	J		P	J
7439-95-4	Magnesium	35400		E	P	J
7439-96-5	Manganese	79.6		E	P	J
7439-97-6	Mercury				NR	
7440-02-0	Nickel	4.9	J		P	
7440-09-7	Potassium	3090	J	E	P	5000UJ
7782-49-2	Selenium	35.0	U		P	
7440-22-4	Silver	1.2	J		P	10.0U
7440-23-5	Sodium	56400		E	P	J
7440-28-0	Thallium	25.0	U		P	
7440-62-2	Vanadium	50.0	U		P	
7440-66-6	Zinc	426		E	P	J
57-12-5	Cyanide				NR	

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

11/20/06

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1W53

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1W35

Matrix: (soil/water) WATER Lab Sample ID: X4831-21

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 0.0

Concentration Units (**ug/L** or **mg/kg** dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	29.9	J		P	200U
7440-36-0	Antimony	22.6	J		P	
7440-38-2	Arsenic	12.4			P	U
7440-39-3	Barium	17.5	J		P	200U
7440-41-7	Beryllium	0.11	J		P	5.0U
7440-43-9	Cadmium	17.4			P	
7440-70-2	Calcium	173000		E	P	J
7440-47-3	Chromium	67.0			P	
7440-48-4	Cobalt	50.0	U		P	
7440-50-8	Copper	19.0	J		P	25.0U
7439-89-6	Iron	1320			P	
7439-92-1	Lead	5.4	J		P	J
7439-95-4	Magnesium	33800		E	P	J
7439-96-5	Manganese	605		E	P	J
7439-97-6	Mercury				NR	
7440-02-0	Nickel	29.5	J		P	
7440-09-7	Potassium	3850	J	E	P	5000UJ
7782-49-2	Selenium	8.0	J		P	35.0U
7440-22-4	Silver	10.0	U		P	
7440-23-5	Sodium	60900		E	P	J
7440-28-0	Thallium	25.0	U		P	
7440-62-2	Vanadium	50.0	U		P	
7440-66-6	Zinc	3900		E	P	J
57-12-5	Cyanide				NR	

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

11/27/08

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1W54

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1W35

Matrix: (soil/water) WATER Lab Sample ID: X4831-22

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	52.9	J		P	200 U
7440-36-0	Antimony	9.6	J		P	
7440-38-2	Arsenic	12.8			P	U
7440-39-3	Barium	56.9	J		P	200 U
7440-41-7	Beryllium	0.090	J		P	5.0 U
7440-43-9	Cadmium	0.66	J		P	
7440-70-2	Calcium	148000		E	P	J
7440-47-3	Chromium	18.2			P	
7440-48-4	Cobalt	50.0	U		P	
7440-50-8	Copper	6.0	J		P	25.0 U
7439-89-6	Iron	280			P	
7439-92-1	Lead	3.7	J		P	J
7439-95-4	Magnesium	34900		E	P	J
7439-96-5	Manganese	192		E	P	J
7439-97-6	Mercury				NR	
7440-02-0	Nickel	8.9	J		P	
7440-09-7	Potassium	3120	J	E	P	5000 U J
7782-49-2	Selenium	8.2	J		P	35.0 U
7440-22-4	Silver	10.0	U		P	
7440-23-5	Sodium	61200		E	P	J
7440-28-0	Thallium	25.0	U		P	
7440-62-2	Vanadium	50.0	U		P	
7440-66-6	Zinc	461		E	P	J
57-12-5	Cyanide				NR	

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

L T 11/27/06

REGION VIII
DATA VALIDATION REPORT
INORGANIC

Case No. / TDD No.	Site Name		Operable Unit
35810 / 0611-06	Lower Silver Creek		
RPM/OSC Name			
Sabrina Forrest			
Contractor Laboratory	**Contract No.**	**SDG No.**	**Laboratory DPO/Region**
ChemTech Consulting Group	EPW06047	MH1PP2	

Review Assigned Date November 16, 2006
Review Completion Date November 30, 2006

Data Validator Lisa Tyson
Report Reviewer Amy Ballow

Sample ID	Matrix	Analysis
MH1PP2	Soil	CLP - Metals
MH1PP3		
MH1PP4		
MH1PP5		
MH1PP6		
MH1PP7		
MH1PP8		
MH1PP9		
MH1PQ0		
MH1PQ1		
MH1PQ2		
MH1PQ3		
MH1PQ4		
MH1PQ5		

Sample ID	Matrix	Analysis
MH1PQ6	Soil	CLP – Metals
MH1PQ7		
MH1PQ8		
MH1PQ9		
MH1PR0		
MH1PR1		

DATA QUALITY STATEMENT

( ) Data are ACCEPTABLE according to EPA Functional guidelines with no qualifiers (flags) added by the reviewer.
( ) Data are UNACCEPTABLE according to EPA Functional Guidelines.
(X) Data are acceptable with QUALIFICATIONS noted in review.

Telephone/Communication Logs Enclosed? Yes _____ No ___X____

CLP Project Officer Attention Required? Yes _____ No ___X____ If yes, list the items that require attention:

INORGANIC DATA VALIDATION REPORT

REVIEW NARRATIVE SUMMARY

This data package was reviewed according to "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review," October 2004.

Raw data were reviewed for completeness and transcription accuracy onto the summary forms. Approximately 10-20% of the results reported in each of the samples, calibrations, and QC analyses were recalculated and verified. If problems were identified during the recalculation of results, a more thorough calculation check was performed.

The data package, Case No. 35810, SDG No. MH1PP2, consisted of 20 soil samples for CLP metals by ICP-AES (ILM05.3). The following table lists the data qualifiers added to the sample analyses. Please see Data Qualifier Definitions, attached to the end of this report.

Sample ID	Elements	Qualifiers	Reason for Qualification	Review Section
MH1PP3, MH1PP6, MH1PQ0, MH1PQ1, MH1PQ2	Barium	U	Laboratory blank contamination	7
MH1PP2, MH1PP4, MH1PP5, MH1PP6, MH1PP8, MH1PP9, MH1PQ0, MH1PQ3, MH1PQ4, MH1PQ5, MH1PQ8, MH1PQ9, MH1PR0, MH1PR1	Beryllium			
MH1PP3	Cadmium			
MH1PQ0, MH1PQ2, MH1PQ4, MH1PR1	Nickel			
MH1PQ0, MH1PQ1, MH1PQ2, MH1PQ3, MH1PQ4, MH1PQ5, MH1PQ6, MH1PQ7, MH1PQ9, MH1PR0, MH1PR1	Potassium			
MH1PP3	Silver			
MH1PP2, MH1PP3, MH1PP4, MH1PP5, MH1PP6, MH1PP7, MH1PP8, MH1PP9, MH1PQ0, MH1PQ1, MH1PQ2, MH1PQ3, MH1PQ4, MH1PQ5, MH1PQ6, MH1PQ8, MH1PQ9, MH1PR0, MH1PR1	Sodium			
MH1PP2, MH1PP3, MH1PQ1, MH1PQ2, MH1PR1	Magnesium	J-	Negative blank contamination	
MH1PP2, MH1PP3, MH1PP4, MH1PP5, MH1PP6, MH1PP7, MH1PP8, MH1PP9	Potassium			

Sample ID	Elements	Qualifiers	Reason for Qualification	Review Section
MH1PP5, MH1PP8, MH1PQ2, MH1PQ3, MH1PQ7, MH1PQ9, MH1PR0	Thallium	J-	Negative blank contamination	7
MH1PP5, MH1PP8, MH1PQ0, MH1PQ6, MH1PQ7, MH1PR0	Selenium			
MH1PP4, MH1PP5, MH1PP8, MH1PQ0, MH1PQ7, MH1PQ9, MH1PR0	Selenium Thallium	J- / UJ	Interference check exceeded criteria, negative interference	8
MH1PP4, MH1PP5, MH1PP8, MH1PQ0, MH1PQ9, MH1PR0	Beryllium Sodium	J+	Interference check exceeded criteria, positive interference	
All samples	Chromium Copper Iron Lead Magnesium Manganese Nickel Sodium Zinc	J/UJ	Serial dilution %D greater than 10% and original sample value at least 50*IDL	14

* Various results for beryllium and sodium were not assigned bias because the results were qualified as non-detected for blank contamination.

1. DELIVERABLES

All deliverables were present as specified in the Statement of Work.

Yes_X_ No____

Comments: None.

2. HOLDING TIMES AND PRESERVATION CRITERIA

All technical holding times and preservation criteria were met.

Yes_X_ No____

Comments: The samples were analyzed within holding times and were received within the recommended temperature range of 4 ± 2°C. Chain-of-custody (COC), summary forms, and raw data were evaluated.

3. INSTRUMENT CALIBRATIONS: STANDARDS AND BLANKS

Initial instrument calibrations were performed according to SOW requirements.

Yes_X_ No____

Comments: None.

The instruments were calibrated daily and each time an analysis run was performed.

Yes_X_ No____

Comments: None.

The instruments were calibrated using one blank and the appropriate number of standards.

Yes_X_ No____

Comments: None.

4. FORM 1 - SAMPLE ANALYSIS RESULTS

Sample analyses were entered correctly on Form Is.

Yes_X_ No____

Comments: The results for zinc in samples MH1PP4 and MH1PP5 were reported from a 4x dilution and the result for zinc in sample MH1PQ0 was reported from a 2x dilution. The laboratory flagged these results with a "D" qualifier.

5. FORM 2A - INITIAL AND CONTINUING CALIBRATION VERIFICATION

The initial and continuing calibration verification standards (ICV and CCV, respectively) met SOW requirements.

Yes_X_ No____

Comments: None.

The calibration verification results were within 90-110% recovery for metals, 85-115% for cyanide, and 80-120% for mercury.

Yes_X_ No____

Comments: None.

The continuing calibration standards were run at 10% frequency or every two hours.

Yes_X_ No____

Comments: None.

6. FORM 2B - CRQL CHECK STANDARD

ICP Analysis: Standards (CRI) were analyzed at the beginning and end of each sample analysis run and every 20 analytical samples, immediately preceding the interferences check sample analyses, but not before ICV analysis.

Yes_X_ No____

Comments: None.

The CRI recoveries were within 70-130% (50-150% for Sb, Pb, and Tl) for required elements.

Yes_X_ No____

Comments: None.

7. FORM 3 - BLANKS

The initial and continuing calibration blanks (ICB and CCB, respectively) met SOW requirements.

Yes_X_ No____

Comments: None.

The continuing calibration blanks were run at 10% frequency.

Yes_X_ No____

Comments: Continuing calibration blanks were run every 10 samples.

A laboratory/preparation blank was run at the frequency of one per twenty samples, or per sample delivery group (whichever is more frequent), and for each matrix analyzed.

Yes_X_ No____

Comments: None.

All analyzed blanks were free of contamination.

Yes____ No_X_

Comments: The following table lists the blanks with contamination that resulted in sample qualification, elements present, affected samples, and data qualifiers:

Blank Contaminants

Blank ID	Contaminant	Concentration Found in Blank (mg/Kg)	Associated Samples	Concentration Found in Sample (mg/Kg)	Qualifier/ Adjustment
PB	Barium	0.103	MH1PP3 MH1PP6 MH1PQ0 MH1PQ1 MH1PQ2	<CRQL	147 U 28.4 U 27.8 U 163 U 256 U
ICB	Beryllium	0.01	MH1PP2 MH1PP4 MH1PP5 MH1PP6 MH1PP8 MH1PP9 MH1PQ0 MH1PQ3 MH1PQ4 MH1PQ5 MH1PQ8 MH1PQ9 MH1PR0 MH1PR1		4.1 U 0.96 U 1.3 U 0.71 U 1.5 U 2.7 U 0.69 U 1.4 U 1.1 U 0.73 U 1.2 U 1.1 U 0.95 U 0.81 U
CCB2	Cadmium	0.059	MH1PP3		3.6 U
CCB3 CCB4	Nickel	0.1025 0.0825	MH1PQ0 MH1PQ2 MH1PQ4 MH1PR1		5.6 U 51.3 U 9.1 U 6.5 U

Blank ID	Contaminant	Concentration Found in Blank (mg/Kg)	Associated Samples	Concentration Found in Sample (mg/Kg)	Qualifier/ Adjustment
CCB3 CCB4 CCB5	Potassium	3.872 6.935 7.629	MH1PQ0 MH1PQ1 MH1PQ2 MH1PQ3 MH1PQ4 MH1PQ5 MH1PQ6 MH1PQ7 MH1PQ9 MH1PR0 MH1PR1	<CRQL	695 U 4065 U 6410 U 1362 U 1136 U 734 U 2500 U 2778 U 1089 U 954 U 809 U
ICB	Silver	0.2015	MH1PP3		7.4 U
ICB	Sodium	0.6325	MH1PP2 MH1PP3 MH1PP4 MH1PP5 MH1PP6 MH1PP7 MH1PP8 MH1PP9 MH1PQ0 MH1PQ1 MH1PQ2 MH1PQ3 MH1PQ4 MH1PQ5 MH1PQ6 MH1PQ8 MH1PQ9 MH1PR0 MH1PR1		4132 U 3676 U 962 U 1266 U 710 U 2577 U 1458 U 2660 U 695 U 4065 U 6410 U 1362 U 1136 U 1734 U 2500 U 1163 U 1089 U 954 U 809 U
PB	Magnesium	-3.408	MH1PP2 MH1PP3 MH1PQ1 MH1PQ2 MH1PR1		J-
PB	Potassium	-4.508	MH1PP2 MH1PP3 MH1PP4 MH1PP5 MH1PP6 MH1PP7 MH1PP8 MH1PP9		
PB	Thallium	-1.015	MH1PP5 MH1PP8 MH1PQ2 MH1PQ3 MH1PQ7 MH1PQ9 MH1PR0		
PB	Selenium	-1.562	MH1PP5 MH1PP8 MH1PQ0 MH1PQ6 MH1PQ7 MH1PR0	<CRQL <CRQL 7.2 <CRQL <CRQL <CRQL	

8. FORM 4 - ICP INTERFERENCE CHECK SAMPLE

The ICP interference check sample (ICS) was run at the beginning and end of each sample analysis run and every 20 analytical samples, but not prior to the ICV.

Yes_X_ No____

Comments: None.

Percent recovery of the analytes in the ICS solutions were within the range of 80-120% or the result was within ±2x the CRQL.

Yes_X_ No____

Comments: None.

Sample results for aluminum, calcium, iron, and magnesium were less than the ICSA values.

Yes___ No_X_

Comments: The following sample results were qualified because the results for iron were greater than the ICSA values and the absolute values of the associated elements were greater than the MDL in the ICSA analysis:

Element	ICSA Result (ug/L)	MDL (ug/L)	Samples Affected	Qualifiers
Selenium	-16.8	3.9	MH1PP4, MH1PP5, MH1PP8, MH1PQ0, MH1PQ7, MH1PQ9, MH1PR0	J- / UJ
Thallium	-19.8	5.3		
Beryllium	0.43 / 0.55	0.032	MH1PP4, MH1PP5, MH1PP8, MH1PQ0, MH1PQ9, MH1PR0	J+
Sodium	856 / 859	3.0		

Various results for beryllium and sodium were not assigned bias because the results were qualified as non-detected for blank contamination.

9. FORM 5A - MATRIX SPIKE SAMPLE ANALYSIS

A matrix spike sample was analyzed with every twenty or fewer samples of a similar matrix, or one per sample delivery group (whichever is more frequent).

Yes_X_ No___ NA___

Comments: None.

The percent recoveries (%Rs) were calculated correctly.

Yes_X_ No___ NA___

Comments: None.

Spike recoveries were within the range of 75-125% (an exception is granted where the sample concentration is four times the spike concentration).

Yes_X_ No___

Comments: None.

10. FORM 5B - POST DIGEST SPIKE RECOVERY

A post-digest spike was performed for those elements that did not meet the specified criteria (i.e., Pre-digestion/pre-distillation spike recovery falls outside of control limits and sample result is less than four times the spike amount added, exception: Ag, Hg).

Yes___ No___ NA_X_

Comments: None.

11. FORM 6 - DUPLICATE SAMPLE ANALYSIS

Duplicate sample analysis was performed with every twenty or fewer samples of a similar matrix, or one per sample delivery group (whichever is more frequent).

Yes_X_ No___ NA___

Comments: None.

The RPDs were calculated correctly.

Yes_X_ No___ NA___

Comments: None.

For sample concentrations greater than five times the CRQL, RPDs were within ±20% (limits of ±35% apply for soil/sediments/tailings samples).

Yes_X_ No___ NA___

Comments: None.

For sample concentrations less than five times the CRQL, duplicate analysis results were within the control window of ± CRQL (two times CRQL for soils).

Yes_X_ No___ NA___

Comments: None.

12. ICP-MS

Comments: ICP-MS analyses were not performed on these samples.

13. FORM 7 - LABORATORY CONTROL SAMPLE

The laboratory control sample (LCS) was prepared and analyzed with every twenty or fewer samples of a similar matrix, or one per sample delivery group (whichever is more frequent).

Yes_X_ No____

Comments: None.

All results were within control limits.

Yes_X_ No____

Comments: Results were within laboratory control limits.

14. FORM 8 - ICP-AES QC

A serial dilution was performed for ICP analysis with every twenty or fewer samples of a similar matrix, or one per sample delivery group, whichever is more frequent.

Yes_X_ No____

Comments: None.

The serial dilution was without interference problems as defined by the SOW.

Yes___ No_X_

Comments: The following serial dilution %Ds were greater than 10% and the original sample result was at least 50* the MDL:

Element	% Difference	Samples Affected	Qualifiers
Chromium	11%	All samples	J/UJ
Copper	19%		
Iron	11%		
Lead	14%		
Magnesium	11%		
Manganese	12%		
Nickel	13%		
Sodium	11%		
Zinc	16%		

15. FORM 9 - ANNUAL METHOD DETECTION LIMITS (MDL)

MDLs were provided for all elements on the target analyte list.

Yes_X_ No____

Comments: None.

Reported MDLs met SOW requirements.

Yes_X_ No____

Comments: None.

16. FORM 10 - INTERELEMENT CORRECTION FACTORS FOR ICP

Interelement corrections for ICP were reported.

Yes_X_ No____

Comments: None.

17. FORM 11 - ICP LINEAR RANGES

ICP linear ranges were reported.

Yes_X_ No____

Comments: None.

18. FORM 12 - PREPARATION LOG

Information on the preparation of samples for analysis was reported on Form 12.

Yes_X_ No____

Comments: None.

19. FORM 13 - ANALYSIS RUN LOG

A Form 13 with the required information was filled out for each analysis run in the data package.

Yes_X_ No____

Comments: None.

20. Additional Comments or Problems/Resolutions Not Addressed Above

Yes____ No_X_

Comments: None.

INORGANIC DATA QUALITY ASSURANCE REVIEW

Region VIII

DATA QUALIFIER DEFINITIONS

For the purpose of Data Validation, the following code letters and associated definitions are provided for use by the data validator to summarize the data quality. Use of additional qualifiers should be carefully considered. Definitions for all qualifiers used should be provided with each report.

GENERAL QUALIFIERS for use with both INORGANIC and ORGANIC DATA

R - Reported value is "rejected." The data are unusable. Resampling or reanalysis may be necessary to verify the presence or absence of the compound.

J - The associated numerical value is an estimated quantity and is the approximate concentration of the analyte in the sample.

J+ - The associated numerical value is an estimated quantity but the result may be biased high.

J- - The associated numerical value is an estimated quantity but the result may be biased low.

U J - The reported quantitation limit is estimated because Quality Control criteria were not met. Element or compound may or may not be present in the sample.

N J - Estimated value of a tentatively identified compound. (Identified with a CAS number.) ORGANICS analysis only.

U - The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

ACRONYMS

AA	Atomic Absorption
Ag	Silver
CCB	Continuing Calibration Blank
CCV	Continuing Calibration Verification
CFR	Code of Federal Regulations
CLP	Contract Laboratory Program
CRA	CRQL standard required for AA
CRQL	Contract Required Quantitation Limit
CRI	CRQL standard required for ICP
CV	Cold Vapor
EPA	U.S. Environmental Protection Agency
GFAA	Graphite Furnace Atomic Absorption
Hg	Mercury
ICB	Initial Calibration Blank
ICP	Inductively Coupled Plasma
ICS	Interference Check Sample
ICSA	Interference Check Sample (Solution A)
ICSAB	Interference Check Sample (Solution AB)
ICV	Initial Calibration Verification
LCS	Laboratory Control Sample
LRA	Linear Range Verification Analysis
MDL	Method Detection Limit
PDS	Post Digestion Spike
QC	Quality Control
RPD	Relative Percent Difference
RPM	Regional Project Manager
RSD	Percent Relative Standard Deviation
SA	Spike Added
SAS	Special Analytical Services
SDG	Sample Delivery Group
SOW	Statement of Work
SR	Sample Result
SSR	Spiked Sample Result

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1PP2

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1PP2

Matrix: (soil/water) SOIL Lab Sample ID: X4805-01

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 12.1

Concentration Units (**ug/L** or **mg/kg** dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	4260			P	
7440-36-0	Antimony	382			P	
7440-38-2	Arsenic	192			P	
7440-39-3	Barium	241			P	
7440-41-7	Beryllium	0.36	J		P	41.1 J
7440-43-9	Cadmium	72.5			P	
7440-70-2	Calcium	16600			P	
7440-47-3	Chromium	23.9		E	P	J
7440-48-4	Cobalt	3.9	J		P	
7440-50-8	Copper	750		E	P	J
7439-89-6	Iron	11800		E	P	J
7439-92-1	Lead	7040		E	P	J
7439-95-4	Magnesium	3230	J	E	P	J-
7439-96-5	Manganese	543		E	P	J
7439-97-6	Mercury				NR	
7440-02-0	Nickel	13.2	J	E	P	J
7440-09-7	Potassium	470	J		P	J-
7782-49-2	Selenium	28.6	U		P	
7440-22-4	Silver	59.5			P	
7440-23-5	Sodium	1380	J	E	P	41.32 J
7440-28-0	Thallium	20.5	U		P	
7440-62-2	Vanadium	13.8	J		P	
7440-66-6	Zinc	8390		E	P	J
57-12-5	Cyanide				NR	

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW Clarity After: _____ Artifacts: _____

Comments:

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AT 11/17/06

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1PP3

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1PP2

Matrix: (soil/water) SOIL Lab Sample ID: X4805-02

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 13.6

Concentration Units (**ug/L** or **mg/kg** dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	854			P
7440-36-0	Antimony	99.9			P
7440-38-2	Arsenic	831			P
7440-39-3	Barium	87.8	J		P
7440-41-7	Beryllium	3.6	U		P
7440-43-9	Cadmium	1.5	J		P
7440-70-2	Calcium	8910			P
7440-47-3	Chromium	33.3		E	P
7440-48-4	Cobalt	36.4	U		P
7440-50-8	Copper	55.3		E	P
7439-89-6	Iron	41100		E	P
7439-92-1	Lead	955		E	P
7439-95-4	Magnesium	752	J	E	P
7439-96-5	Manganese	78.7		E	P
7439-97-6	Mercury				NR
7440-02-0	Nickel	10.8	J	E	P
7440-09-7	Potassium	278	J		P
7782-49-2	Selenium	25.5	U		P
7440-22-4	Silver	3.3	J		P
7440-23-5	Sodium	330	J	E	P
7440-28-0	Thallium	18.2	U		P
7440-62-2	Vanadium	32.5	J		P
7440-66-6	Zinc	617		E	P
57-12-5	Cyanide				NR

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW Clarity After: _____ Artifacts: _____

Comments:

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1PP4

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1PP2

Matrix: (soil/water) SOIL Lab Sample ID: X4805-03

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 52.0

Concentration Units (**ug/L** or **mg/kg** dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	1260			P	
7440-36-0	Antimony	97.8			P	
7440-38-2	Arsenic	219			P	
7440-39-3	Barium	128			P	
7440-41-7	Beryllium	0.093	J		P	0.96 UJ
7440-43-9	Cadmium	112			P	
7440-70-2	Calcium	16700			P	
7440-47-3	Chromium	34.6		E	P	J
7440-48-4	Cobalt	25.8			P	
7440-50-8	Copper	236		E	P	J
7439-89-6	Iron	27000		E	P	J
7439-92-1	Lead	4060		E	P	J
7439-95-4	Magnesium	5130		E	P	J
7439-96-5	Manganese	7270		E	P	J
7439-97-6	Mercury				NR	
7440-02-0	Nickel	17.1		E	P	J
7440-09-7	Potassium	219	J		P	J-
7782-49-2	Selenium	6.7	U		P	UJ
7440-22-4	Silver	19.1			P	
7440-23-5	Sodium	213	J	E	P	962 UJ
7440-28-0	Thallium	4.8	U		P	UJ
7440-62-2	Vanadium	8.0	J		P	
7440-66-6	Zinc	28600		ED	P	J
57-12-5	Cyanide				NR	

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW Clarity After: _____ Artifacts: _____

Comments:

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JT 11/27/06

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1PP5

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1PP2

Matrix: (soil/water) SOIL Lab Sample ID: X4805-04

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 39.5

Concentration Units (**ug/L** or **mg/kg** dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	2870			P	
7440-36-0	Antimony	176			P	
7440-38-2	Arsenic	335			P	
7440-39-3	Barium	74.9			P	
7440-41-7	Beryllium	0.14	J		P	~~1.27UJ~~ 1.3UJ
7440-43-9	Cadmium	138			P	
7440-70-2	Calcium	14700			P	
7440-47-3	Chromium	12.3		E	P	J
7440-48-4	Cobalt	12.2	J		P	
7440-50-8	Copper	332		E	P	J
7439-89-6	Iron	42000		E	P	J
7439-92-1	Lead	5140		E	P	J
7439-95-4	Magnesium	5990		E	P	J
7439-96-5	Manganese	931		E	P	J
7439-97-6	Mercury				NR	
7440-02-0	Nickel	8.5	J	E	P	J
7440-09-7	Potassium	429	J		P	J-
7782-49-2	Selenium	8.0	J		P	J-
7440-22-4	Silver	35.8			P	
7440-23-5	Sodium	299	J	E	P	1266UJ
7440-28-0	Thallium	3.2	J		P	J-
7440-62-2	Vanadium	11.3	J		P	
7440-66-6	Zinc	36400		ED	P	J
57-12-5	Cyanide				NR	

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW Clarity After: _____ Artifacts: _____

Comments:

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USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1PP6

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1PP2

Matrix: (soil/water) SOIL Lab Sample ID: X4805-05

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 70.4

Concentration Units (**ug/L** or **mg/kg** dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	566			P	
7440-36-0	Antimony	72.3			P	
7440-38-2	Arsenic	167			P	
7440-39-3	Barium	23.8	J		P	28.4 U
7440-41-7	Beryllium	0.054	J		P	0.71 U
7440-43-9	Cadmium	30.8			P	
7440-70-2	Calcium	28100			P	
7440-47-3	Chromium	7.3		E	P	J
7440-48-4	Cobalt	2.4	J		P	
7440-50-8	Copper	113		E	P	J
7439-89-6	Iron	12000		E	P	J
7439-92-1	Lead	2480		E	P	J
7439-95-4	Magnesium	7190		E	P	J
7439-96-5	Manganese	1680		E	P	J
7439-97-6	Mercury				NR	
7440-02-0	Nickel	3.4	J	E	P	J
7440-09-7	Potassium	120	J		P	J
7782-49-2	Selenium	5.0	U		P	
7440-22-4	Silver	12.2			P	
7440-23-5	Sodium	173	J	E	P	710 U J
7440-28-0	Thallium	3.6	U		P	
7440-62-2	Vanadium	3.1	J		P	
7440-66-6	Zinc	5860		E	P	J
57-12-5	Cyanide				NR	

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW Clarity After: _____ Artifacts: _____

Comments:

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USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1PP7

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1PP2

Matrix: (soil/water) SOIL Lab Sample ID: X4805-06

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 19.4

Concentration Units (**ug/L** or **mg/kg** dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	4550			P	
7440-36-0	Antimony	239			P	
7440-38-2	Arsenic	399			P	
7440-39-3	Barium	163			P	
7440-41-7	Beryllium	2.6	U		P	
7440-43-9	Cadmium	85.7			P	
7440-70-2	Calcium	89800			P	
7440-47-3	Chromium	44.5		E	P	J
7440-48-4	Cobalt	5.0	J		P	
7440-50-8	Copper	523		E	P	J
7439-89-6	Iron	23800		E	P	J
7439-92-1	Lead	6680		E	P	J
7439-95-4	Magnesium	6250		E	P	J
7439-96-5	Manganese	1710		E	P	J
7439-97-6	Mercury				NR	
7440-02-0	Nickel	16.1	J	E	P	~~J~~ J-
7440-09-7	Potassium	512	J		P	J-
7782-49-2	Selenium	18.0	U		P	
7440-22-4	Silver	51.2			P	
7440-23-5	Sodium	767	J	E	P	25770 J
7440-28-0	Thallium	12.9	U		P	
7440-62-2	Vanadium	12.7	J		P	
7440-66-6	Zinc	17100		E	P	J
57-12-5	Cyanide				NR	

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW Clarity After: _____ Artifacts: _____

Comments:

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USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1PP8

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1PP2

Matrix: (soil/water) SOIL Lab Sample ID: X4805-07

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 34.3

Concentration Units (**ug/L** or **mg/kg** dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	2340			P	
7440-36-0	Antimony	151			P	
7440-38-2	Arsenic	190			P	
7440-39-3	Barium	106			P	
7440-41-7	Beryllium	0.18	J		P	~~1.6~~ 1.5UJ
7440-43-9	Cadmium	175			P	
7440-70-2	Calcium	19400			P	
7440-47-3	Chromium	42.4		E	P	J
7440-48-4	Cobalt	9.4	J		P	
7440-50-8	Copper	367		E	P	J
7439-89-6	Iron	30400		E	P	J
7439-92-1	Lead	5110		E	P	J
7439-95-4	Magnesium	5000		E	P	J
7439-96-5	Manganese	1150		E	P	J
7439-97-6	Mercury				NR	
7440-02-0	Nickel	13.4		E	P	J
7440-09-7	Potassium	311	J		P	J-
7782-49-2	Selenium	9.2	J		P	J-
7440-22-4	Silver	28.2			P	
7440-23-5	Sodium	293	J	E	P	1458UJ
7440-28-0	Thallium	2.3	J		P	J-
7440-62-2	Vanadium	9.7	J		P	
7440-66-6	Zinc	12900		E	P	J
57-12-5	Cyanide				NR	

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW Clarity After: _____ Artifacts: _____

Comments:

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CT 11/27/06

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1PP9

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1PP2

Matrix: (soil/water) SOIL Lab Sample ID: X4805-08

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 18.8

Concentration Units (**ug/L** or **mg/kg** dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	3180			P	
7440-36-0	Antimony	127			P	
7440-38-2	Arsenic	400			P	
7440-39-3	Barium	153			P	
7440-41-7	Beryllium	0.25	J		P	~~2.6U~~ 2.7U
7440-43-9	Cadmium	125			P	
7440-70-2	Calcium	9830			P	
7440-47-3	Chromium	101		E	P	J
7440-48-4	Cobalt	25.1	J		P	
7440-50-8	Copper	287		E	P	J
7439-89-6	Iron	36700		E	P	J
7439-92-1	Lead	4540		E	P	J
7439-95-4	Magnesium	3210		E	P	J
7439-96-5	Manganese	2060		E	P	J
7439-97-6	Mercury				NR	
7440-02-0	Nickel	47.3		E	P	J
7440-09-7	Potassium	656	J		P	J
7782-49-2	Selenium	18.4	U		P	
7440-22-4	Silver	26.3			P	
7440-23-5	Sodium	595	J	E	P	266U J
7440-28-0	Thallium	13.2	U		P	
7440-62-2	Vanadium	11.5	J		P	
7440-66-6	Zinc	13900		E	P	J
57-12-5	Cyanide				NR	

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW Clarity After: _____ Artifacts: _____

Comments:

LT 11/27/06

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1PQ0

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1PP2

Matrix: (soil/water) SOIL Lab Sample ID: X4805-09

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 71.9

Concentration Units (**ug/L** or **mg/kg** dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	604			P	
7440-36-0	Antimony	116			P	
7440-38-2	Arsenic	110			P	
7440-39-3	Barium	25.3	J		P	27.8 UJ
7440-41-7	Beryllium	0.055	J		P	0.69 UJ
7440-43-9	Cadmium	57.8			P	
7440-70-2	Calcium	26700			P	
7440-47-3	Chromium	6.9		E	P	J
7440-48-4	Cobalt	6.4	J		P	
7440-50-8	Copper	194		E	P	J
7439-89-6	Iron	27700		E	P	J
7439-92-1	Lead	2940		E	P	J
7439-95-4	Magnesium	8390		E	P	J
7439-96-5	Manganese	1110		E	P	J
7439-97-6	Mercury				NR	
7440-02-0	Nickel	4.3	J	E	P	5.6 UJ
7440-09-7	Potassium	162	J		P	695 UJ
7782-49-2	Selenium	7.2			P	J
7440-22-4	Silver	20.3			P	
7440-23-5	Sodium	83.2	J	E	P	695 UJ
7440-28-0	Thallium	3.4	U		P	UJ
7440-62-2	Vanadium	3.2	J		P	
7440-66-6	Zinc	8520		ED	P	J
57-12-5	Cyanide				NR	

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW Clarity After: _____ Artifacts: _____

Comments:

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CT 11/27/06

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1PQ1

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1PP2

Matrix: (soil/water) SOIL Lab Sample ID: X4805-10

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 12.3

Concentration Units (**ug/L** or **mg/kg** dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	5430			P	
7440-36-0	Antimony	35.1	J		P	
7440-38-2	Arsenic	134			P	
7440-39-3	Barium	162	J		P	163V
7440-41-7	Beryllium	4.1	U		P	
7440-43-9	Cadmium	23.9			P	
7440-70-2	Calcium	11400			P	
7440-47-3	Chromium	329		E	P	J
7440-48-4	Cobalt	9.9	J		P	
7440-50-8	Copper	107		E	P	J
7439-89-6	Iron	29300		E	P	J
7439-92-1	Lead	1120		E	P	J
7439-95-4	Magnesium	3100	J	E	P	J-
7439-96-5	Manganese	2110		E	P	J
7439-97-6	Mercury				NR	
7440-02-0	Nickel	113		E	P	J
7440-09-7	Potassium	1050	J		P	406SV
7782-49-2	Selenium	28.5	U		P	
7440-22-4	Silver	9.0			P	
7440-23-5	Sodium	384	J	E	P	406SV J
7440-28-0	Thallium	20.3	U		P	
7440-62-2	Vanadium	13.2	J		P	
7440-66-6	Zinc	3590		E	P	J
57-12-5	Cyanide				NR	

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW Clarity After: _____ Artifacts: _____

Comments:

LT 11/27/06

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1PQ2

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1PP2

Matrix: (soil/water) SOIL Lab Sample ID: X4805-11

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 7.8

Concentration Units (**ug/L** or **mg/kg** dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	1490			P	
7440-36-0	Antimony	399			P	
7440-38-2	Arsenic	428			P	
7440-39-3	Barium	55.4	J		P	2.56 U
7440-41-7	Beryllium	6.4	U		P	
7440-43-9	Cadmium	285			P	
7440-70-2	Calcium	23700			P	
7440-47-3	Chromium	36.5		E	P	J
7440-48-4	Cobalt	13.2	J		P	
7440-50-8	Copper	512		E	P	J
7439-89-6	Iron	23900		E	P	J
7439-92-1	Lead	5440		E	P	J
7439-95-4	Magnesium	1750	J	E	P	J
7439-96-5	Manganese	892		E	P	J
7439-97-6	Mercury				NR	
7440-02-0	Nickel	16.0	J	E	P	51.3 U J
7440-09-7	Potassium	480	J		P	641.0 U
7782-49-2	Selenium	44.9	U		P	
7440-22-4	Silver	14.1			P	
7440-23-5	Sodium	1060	J	E	P	641.0 U J
7440-28-0	Thallium	47.2			P	J
7440-62-2	Vanadium	6.5	J		P	
7440-66-6	Zinc	21800		E	P	J
57-12-5	Cyanide				NR	

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW Clarity After: _____ Artifacts: _____

Comments:

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USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1PQ3

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1PP2

Matrix: (soil/water) SOIL Lab Sample ID: X4805-12

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 36.7

Concentration Units (**ug/L** or **mg/kg** dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	3360			P	
7440-36-0	Antimony	123			P	
7440-38-2	Arsenic	219			P	
7440-39-3	Barium	103			P	
7440-41-7	Beryllium	0.24	J		P	1.4U
7440-43-9	Cadmium	44.4			P	
7440-70-2	Calcium	11100			P	
7440-47-3	Chromium	27.2		E	P	J
7440-48-4	Cobalt	14.2			P	
7440-50-8	Copper	552		E	P	J
7439-89-6	Iron	22300		E	P	J
7439-92-1	Lead	4750		E	P	J
7439-95-4	Magnesium	3800		E	P	J
7439-96-5	Manganese	2370		E	P	J
7439-97-6	Mercury				NR	
7440-02-0	Nickel	12.9		E	P	J
7440-09-7	Potassium	607	J		P	362U
7782-49-2	Selenium	9.5	U		P	
7440-22-4	Silver	30.6			P	
7440-23-5	Sodium	376	J	E	P	1362UJ
7440-28-0	Thallium	2.1	J		P	J-
7440-62-2	Vanadium	10.8	J		P	
7440-66-6	Zinc	10900		E	P	J
57-12-5	Cyanide				NR	

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW Clarity After: _____ Artifacts: _____

Comments:

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LT 11/27/06

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1PQ4

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1PP2

Matrix: (soil/water) SOIL Lab Sample ID: X4805-13

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 44.0

Concentration Units (**ug/L** or **mg/kg** dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	2640			P	
7440-36-0	Antimony	73.2			P	
7440-38-2	Arsenic	97.5			P	
7440-39-3	Barium	90.1			P	
7440-41-7	Beryllium	0.14	J		P	1.1U
7440-43-9	Cadmium	33.0			P	
7440-70-2	Calcium	8180			P	
7440-47-3	Chromium	15.4		E	P	J
7440-48-4	Cobalt	5.3	J		P	
7440-50-8	Copper	196		E	P	J
7439-89-6	Iron	9210		E	P	J
7439-92-1	Lead	2570		E	P	J
7439-95-4	Magnesium	2680		E	P	J
7439-96-5	Manganese	643		E	P	J
7439-97-6	Mercury				NR	
7440-02-0	Nickel	8.3	J	E	P	9.1UJ
7440-09-7	Potassium	499	J		P	1136U
7782-49-2	Selenium	8.0	U		P	
7440-22-4	Silver	19.9			P	
7440-23-5	Sodium	193	J	E	P	1136UJ
7440-28-0	Thallium	5.7	U		P	
7440-62-2	Vanadium	8.2	J		P	
7440-66-6	Zinc	5450		E	P	J
57-12-5	Cyanide				NR	

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW Clarity After: _____ Artifacts: _____

Comments:

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J 11/27/06

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1PQ5

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1PP2

Matrix: (soil/water) SOIL Lab Sample ID: X4805-14

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 68.1

Concentration Units (**ug/L** or **mg/kg** dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	3100			P	
7440-36-0	Antimony	8.5	J		P	
7440-38-2	Arsenic	24.6			P	
7440-39-3	Barium	97.2			P	
7440-41-7	Beryllium	0.20	J		P	0.73U
7440-43-9	Cadmium	8.5			P	
7440-70-2	Calcium	7250			P	
7440-47-3	Chromium	9.8		E	P	J
7440-48-4	Cobalt	3.4	J		P	
7440-50-8	Copper	61.1		E	P	J
7439-89-6	Iron	8010		E	P	J
7439-92-1	Lead	550		E	P	J
7439-95-4	Magnesium	1760		E	P	J
7439-96-5	Manganese	1050		E	P	J
7439-97-6	Mercury				NR	
7440-02-0	Nickel	6.7		E	P	J
7440-09-7	Potassium	605	J		P	734U
7782-49-2	Selenium	5.1	U		P	
7440-22-4	Silver	4.0			P	
7440-23-5	Sodium	177	J	E	P	734U J
7440-28-0	Thallium	3.7	U		P	
7440-62-2	Vanadium	7.5			P	
7440-66-6	Zinc	2110		E	P	J
57-12-5	Cyanide				NR	

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW Clarity After: _____ Artifacts: _____

Comments:

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J 11/27/06

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1PQ6

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1PP2

Matrix: (soil/water) SOIL Lab Sample ID: X4805-15

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 20.0

Concentration Units (**ug/L** or **mg/kg** dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	6520			P	
7440-36-0	Antimony	128			P	
7440-38-2	Arsenic	185			P	
7440-39-3	Barium	117			P	
7440-41-7	Beryllium	3.9			P	
7440-43-9	Cadmium	59.3			P	
7440-70-2	Calcium	10300			P	
7440-47-3	Chromium	17.5		E	P	J
7440-48-4	Cobalt	18.6	J		P	
7440-50-8	Copper	411		E	P	J
7439-89-6	Iron	40200		E	P	J
7439-92-1	Lead	4250		E	P	J
7439-95-4	Magnesium	3130		E	P	J
7439-96-5	Manganese	465		E	P	J
7439-97-6	Mercury				NR	
7440-02-0	Nickel	39.9		E	P	J
7440-09-7	Potassium	563	J		P	2500 J
7782-49-2	Selenium	5.1	J		P	J-
7440-22-4	Silver	19.3			P	
7440-23-5	Sodium	835	J	E	P	2500 J
7440-28-0	Thallium	12.5	U		P	
7440-62-2	Vanadium	16.9	J		P	
7440-66-6	Zinc	13800		E	P	J
57-12-5	Cyanide				NR	

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW Clarity After: _____ Artifacts: _____

Comments:

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CT 11/27/06

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1PQ7

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1PP2

Matrix: (soil/water) SOIL Lab Sample ID: X4805-16

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 18.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	11500			P	
7440-36-0	Antimony	104			P	
7440-38-2	Arsenic	237			P	
7440-39-3	Barium	153			P	
7440-41-7	Beryllium	8.4			P	
7440-43-9	Cadmium	77.4			P	
7440-70-2	Calcium	19400			P	
7440-47-3	Chromium	28.0		E	P	J
7440-48-4	Cobalt	27.8			P	
7440-50-8	Copper	543		E	P	J
7439-89-6	Iron	91800		E	P	J
7439-92-1	Lead	3990		E	P	J
7439-95-4	Magnesium	4870		E	P	J
7439-96-5	Manganese	970		E	P	J
7439-97-6	Mercury				NR	
7440-02-0	Nickel	45.6		E	P	J
7440-09-7	Potassium	1190	J		P	2778 J-
7782-49-2	Selenium	13.0	J		P	
7440-22-4	Silver	24.3			P	
7440-23-5	Sodium	5150		E	P	J
7440-28-0	Thallium	4.9	J		P	J-
7440-62-2	Vanadium	25.8	J		P	
7440-66-6	Zinc	14100		E	P	J
57-12-5	Cyanide				NR	

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW Clarity After: _____ Artifacts: _____

Comments:

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J- 11/27/06

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1PQ8

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1PP2

Matrix: (soil/water) SOIL Lab Sample ID: X4805-17

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 43.0

Concentration Units (**ug/L** or **mg/kg** dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	11900			P	
7440-36-0	Antimony	14.0	U		P	
7440-38-2	Arsenic	13.5			P	
7440-39-3	Barium	306			P	
7440-41-7	Beryllium	0.70	J		P	~~1.1 U~~ 1.2 U
7440-43-9	Cadmium	1.4			P	
7440-70-2	Calcium	16400			P	
7440-47-3	Chromium	1200		E	P	J
7440-48-4	Cobalt	11.0	J		P	
7440-50-8	Copper	33.5		E	P	J
7439-89-6	Iron	21000		E	P	J
7439-92-1	Lead	185		E	P	J
7439-95-4	Magnesium	5410		E	P	J
7439-96-5	Manganese	599		E	P	J
7439-97-6	Mercury				NR	
7440-02-0	Nickel	128		E	P	J
7440-09-7	Potassium	2940			P	
7782-49-2	Selenium	8.1	U		P	
7440-22-4	Silver	2.3	U		P	
7440-23-5	Sodium	975	J	E	P	1163 U J
7440-28-0	Thallium	5.8	U		P	
7440-62-2	Vanadium	39.0			P	
7440-66-6	Zinc	303		E	P	J
57-12-5	Cyanide				NR	

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW Clarity After: _____ Artifacts: _____

Comments:

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LT 11/27/06

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1PQ9

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1PP2

Matrix: (soil/water) SOIL Lab Sample ID: X4805-20

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 45.9

Concentration Units (**ug/L** or **mg/kg** dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	647			P	
7440-36-0	Antimony	207			P	
7440-38-2	Arsenic	466			P	
7440-39-3	Barium	105			P	1.1U
7440-41-7	Beryllium	0.096	J		P	J+
7440-43-9	Cadmium	41.2			P	
7440-70-2	Calcium	20500			P	
7440-47-3	Chromium	67.3		E	P	J
7440-48-4	Cobalt	11.0			P	
7440-50-8	Copper	358		E	P	J
7439-89-6	Iron	101000		E	P	J
7439-92-1	Lead	9090		E	P	J
7439-95-4	Magnesium	7330		E	P	J
7439-96-5	Manganese	1070		E	P	J
7439-97-6	Mercury				NR	
7440-02-0	Nickel	25.7		E	P	J
7440-09-7	Potassium	231	J		P	1089U
7782-49-2	Selenium	34.7			P	J-
7440-22-4	Silver	44.9			P	
7440-23-5	Sodium	218	J	E	P	1089UJ
7440-28-0	Thallium	7.8			P	J-
7440-62-2	Vanadium	4.0	J		P	
7440-66-6	Zinc	6000		E	P	J
57-12-5	Cyanide				NR	

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW Clarity After: _____ Artifacts: _____

Comments:

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LTH 1/17/08

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1PR0

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1PP2

Matrix: (soil/water) SOIL Lab Sample ID: X4805-21

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 52.4

Concentration Units (**ug/L** or **mg/kg** dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	2050			P	
7440-36-0	Antimony	88.8			P	
7440-38-2	Arsenic	204			P	
7440-39-3	Barium	79.8			P	
7440-41-7	Beryllium	0.19	J		P	0.95UJ
7440-43-9	Cadmium	44.5			P	
7440-70-2	Calcium	22400			P	
7440-47-3	Chromium	28.8		E	P	J
7440-48-4	Cobalt	8.4	J		P	
7440-50-8	Copper	329		E	P	J
7439-89-6	Iron	27400		E	P	J
7439-92-1	Lead	4300		E	P	J
7439-95-4	Magnesium	5710		E	P	J
7439-96-5	Manganese	1640		E	P	J
7439-97-6	Mercury				NR	
7440-02-0	Nickel	12.2		E	P	J
7440-09-7	Potassium	465	J		P	954U
7782-49-2	Selenium	5.1	J		P	J-
7440-22-4	Silver	28.7			P	
7440-23-5	Sodium	134	J	E	P	954UJ
7440-28-0	Thallium	3.8	J		P	J-
7440-62-2	Vanadium	7.8	J		P	
7440-66-6	Zinc	7580		E	P	J
57-12-5	Cyanide				NR	

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW Clarity After: _____ Artifacts: _____

Comments:

UT 11/27/06

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1PR1

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1PP2

Matrix: (soil/water) SOIL Lab Sample ID: X4805-22

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 61.8

Concentration Units (**ug/L** or **mg/kg** dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	1010			P	
7440-36-0	Antimony	15.6			P	
7440-38-2	Arsenic	30.0			P	
7440-39-3	Barium	43.5			P	
7440-41-7	Beryllium	0.078	J		P	0.81U
7440-43-9	Cadmium	11.5			P	
7440-70-2	Calcium	2260			P	
7440-47-3	Chromium	10.7		E	P	J
7440-48-4	Cobalt	3.4	J		P	
7440-50-8	Copper	35.0		E	P	J
7439-89-6	Iron	6060		E	P	J
7439-92-1	Lead	572		E	P	J
7439-95-4	Magnesium	795	J	E	P	J-
7439-96-5	Manganese	370		E	P	J
7439-97-6	Mercury				NR	
7440-02-0	Nickel	5.7	J	E	P	8.2U J
7440-09-7	Potassium	168	J		P	302U
7782-49-2	Selenium	5.7	U		P	
7440-22-4	Silver	2.8			P	
7440-23-5	Sodium	88.0	J	E	P	302U J
7440-28-0	Thallium	4.0	U		P	
7440-62-2	Vanadium	6.0	J		P	
7440-66-6	Zinc	1270		E	P	J
57-12-5	Cyanide				NR	

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW Clarity After: _____ Artifacts: _____

Comments:

UT 11/20/06

REGION VIII
DATA VALIDATION REPORT
INORGANIC

Case No. / TDD No.	Site Name		Operable Unit
35810 / 0611-06	Lower Silver Creek		
RPM/OSC Name			
Sabrina Forrest			
Contractor Laboratory	**Contract No.**	**SDG No.**	**Laboratory DPO/Region**
ChemTech Consulting Group	EPW06047	MH1PR5	

Review Assigned Date November 16, 2006
Review Completion Date November 30, 2006

Data Validator Lisa Tyson
Report Reviewer Amy Ballow

Sample ID	Matrix	Analysis
MH1PR5	Water	CLP – Total Metals
MH1PR6		
MH1PR7		
MH1PR8		
MH1PR9		
MH1PS0		
MH1PS1		
MH1PS2		
MH1PS3		
MH1PS4		
MH1PS5		
MH1PS6		
MH1PS7		
MH1PS8		

Sample ID	Matrix	Analysis
MH1PS9	Water	CLP – Total Metals
MH1PT0		
MH1PT1		
MH1PT2		
MH1PT3		
MH1PT4		

DATA QUALITY STATEMENT

( ) Data are ACCEPTABLE according to EPA Functional guidelines with no qualifiers (flags) added by the reviewer.
( ) Data are UNACCEPTABLE according to EPA Functional Guidelines.
(X) Data are acceptable with QUALIFICATIONS noted in review.

Telephone/Communication Logs Enclosed? Yes _____ No ___X____

CLP Project Officer Attention Required? Yes _____ No ___X____ If yes, list the items that require attention:

INORGANIC DATA VALIDATION REPORT

REVIEW NARRATIVE SUMMARY

This data package was reviewed according to "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review," October 2004.

Raw data were reviewed for completeness and transcription accuracy onto the summary forms. Approximately 10-20% of the results reported in each of the samples, calibrations, and QC analyses were recalculated and verified. If problems were identified during the recalculation of results, a more thorough calculation check was performed.

The data package, Case No. 35810, SDG No. MH1PR5, consisted of 20 water samples for CLP total metals by ICP-AES (ILM05.3). The following table lists the data qualifiers added to the sample analyses. Please see Data Qualifier Definitions, attached to the end of this report.

Sample ID	Elements	Qualifiers	Reason for Qualification	Review Section
All samples	Antimony Beryllium	U	Laboratory blank contamination	7
MH1PR7, MH1PR8, MH1PR9, MH1PS0, MH1PS1, MH1PS2, MH1PS3, MH1PS4, MH1PS5, MH1PS6, MH1PS8, MH1PS9, MH1PT1, MH1PT2, MH1PT3, MH1PT4	Arsenic			
All samples except MH1PT1	Barium			
MH1PR5, MH1PR7, MH1PR8, MH1PR9, MH1PS0, MH1PS1, MH1PS2, MH1PS3, MH1PS4, MH1PS5, MH1PS6, MH1PS7, MH1PS8, MH1PS9, MH1PT0, MH1PT2, MH1PT3, MH1PT4	Copper			
MH1PT3	Iron			
MH1PR5, MH1PR7, MH1PR8, MH1PR9, MH1PS1, MH1PS2, MH1PS4, MH1PS5, MH1PS6, MH1PS7, MH1PS9, MH1PT0, MH1PT2	Lead			
MH1PR5, MH1PR7, MH1PR8, MH1PR9, MH1PS0, MH1PS1, MH1PS2, MH1PS3, MH1PS4, MH1PS5, MH1PS6, MH1PS7, MH1PS8	Nickel			

Sample ID	Elements	Qualifiers	Reason for Qualification	Review Section
MH1PR5, MH1PR7, MH1PR8, MH1PR9, MH1PS0, MH1PS1, MH1PS2, MH1PS3, MH1PS4, MH1PS7, MH1PS8, MH1PT2, MH1PT3, MH1PT4	Potassium	U	Laboratory blank contamination	7
MH1PS4	Silver			
MH1PS4, MH1PS8	Aluminum	J-	Negative blank contamination	
MH1PR5	Selenium			
MH1PR6, MH1PS4, MH1PT1	Selenium Thallium	UJ	Interference check exceeded criteria, negative interference	8
	Beryllium*	J+	Interference check exceeded criteria, positive interference	
MH1PS4, MH1PT1	Arsenic*			
MH1PS4	Potassium* Silver*			
All samples	Aluminum Potassium Sodium Zinc	J/UJ	Serial dilution %D greater than 10% and original sample value at least 50*IDL	14

* The results for beryllium in samples MH1PR6, MH1PS4, and MH1PT1; arsenic in samples MH1PS4 and MH1PT1; and potassium and silver in sample MH1PS4 were not assigned bias because the results were qualified as non-detected for blank contamination.

1. DELIVERABLES

All deliverables were present as specified in the Statement of Work.

Yes_X_ No____

Comments: None.

2. HOLDING TIMES AND PRESERVATION CRITERIA

All technical holding times and preservation criteria were met.

Yes_X_ No____

Comments: The samples were analyzed within holding times and were received within the recommended temperature range of 4 ± 2°C. Chain-of-custody (COC), summary forms, and raw data were evaluated.

3. INSTRUMENT CALIBRATIONS: STANDARDS AND BLANKS

Initial instrument calibrations were performed according to SOW requirements.

Yes_X_ No____

Comments: None.

The instruments were calibrated daily and each time an analysis run was performed.

Yes_X_ No____

Comments: None.

The instruments were calibrated using one blank and the appropriate number of standards.

Yes_X_ No____

Comments: None.

4. FORM 1 - SAMPLE ANALYSIS RESULTS

Sample analyses were entered correctly on Form Is.

Yes_X_ No____

Comments: The result for zinc in sample MH1PR6 was reported from a 2x dilution.

5. FORM 2A - INITIAL AND CONTINUING CALIBRATION VERIFICATION

The initial and continuing calibration verification standards (ICV and CCV, respectively) met SOW requirements.

Yes_X_ No____

Comments: None.

The calibration verification results were within 90-110% recovery for metals, 85-115% for cyanide, and 80-120% for mercury.

Yes_X_ No____

Comments: None.

The continuing calibration standards were run at 10% frequency or every two hours.

Yes_X_ No____

Comments: None.

6. FORM 2B - CRQL CHECK STANDARD

ICP Analysis: Standards (CRI) were analyzed at the beginning and end of each sample analysis run and every 20 analytical samples, immediately preceding the interferences check sample analyses, but not before ICV analysis.

Yes_X_ No____

Comments: None.

The CRI recoveries were within 70-130% (50-150% for Sb, Pb, and Tl) for required elements.

Yes_X_ No____

Comments: None.

7. FORM 3 - BLANKS

The initial and continuing calibration blanks (ICB and CCB, respectively) met SOW requirements.

Yes_X_ No____

Comments: None.

The continuing calibration blanks were run at 10% frequency.

Yes_X_ No____

Comments: Continuing calibration blanks were run every 10 samples.

A laboratory/preparation blank was run at the frequency of one per twenty samples, or per sample delivery group (whichever is more frequent), and for each matrix analyzed.

Yes_X_ No____

Comments: None.

All analyzed blanks were free of contamination.

Yes____ No_X_

Comments: The following table lists the blanks with contamination that resulted in sample qualification, elements present, affected samples, and data qualifiers:

Blank Contaminants

Blank ID	Contaminant	Concentration Found in Blank (ug/L)	Associated Samples	Concentration Found in Sample (ug/L)	Qualifier/ Adjustment
PB	Aluminum	-43.54	MH1PS4 MH1PS8	<CRQL	J-
CCB4	Selenium	-11.745	MH1PR5		
PB	Antimony	3.355	All samples		60.0 U
PB	Beryllium	0.135			5.0 U
CCB4 CCB6 CCB7 CCB8	Arsenic	8.835 4.82 6.28 6.47	MH1PR7 MH1PR8 MH1PR9 MH1PS0 MH1PS1 MH1PS2 MH1PS3 MH1PS4 MH1PS5 MH1PS6 MH1PS8 MH1PS9 MH1PT1 MH1PT2 MH1PT3 MH1PT4	13.6 <CRQL 13.3 <CRQL 11.3 <CRQL 20.4 20.3 10.1 <CRQL 11.8 <CRQL 12.3 13.9 <CRQL <CRQL	U 10.0 U U 10.0 U U 10.0 U U U U 10.0 U U 10.0 U U U 10.0 U 10.0 U
PB	Barium	0.565	All samples except MH1PT1	<CRQL	200 U
CCB8	Iron	42.420	MH1PT3	100	U

Blank ID	Contaminant	Concentration Found in Blank (ug/L)	Associated Samples	Concentration Found in Sample (ug/L)	Qualifier/ Adjustment
PB	Copper	0.945	MH1PR5 MH1PR7 MH1PR8 MH1PR9 MH1PS0 MH1PS1 MH1PS2 MH1PS3 MH1PS4 MH1PS5 MH1PS6 MH1PS7 MH1PS8 MH1PS9 MH1PT0 MH1PT2 MH1PT3 MH1PT4	<CRQL	25.0 U
PB	Lead	5.32	MH1PR5 MH1PR7 MH1PR8 MH1PR9 MH1PS1 MH1PS2 MH1PS4 MH1PS5 MH1PS6 MH1PS7 MH1PS9 MH1PT0 MH1PT2	20.7 <CRQL <CRQL <CRQL 10.5 <CRQL 16.0 23.1 22.1 <CRQL 14.0 11.9 17.1	U 10.0 U 10.0 U 10.0 U U 10.0 U U U U 10.0 U U U U
CCB5	Nickel	0.825	MH1PR5 MH1PR7 MH1PR8 MH1PR9 MH1PS0 MH1PS1 MH1PS2 MH1PS3 MH1PS4 MH1PS5 MH1PS6 MH1PS7 MH1PS8	<CRQL	40.0 U
PB	Potassium	77.445	MH1PR5 MH1PR7 MH1PR8 MH1PR9 MH1PS0 MH1PS1 MH1PS2 MH1PS3 MH1PS4 MH1PS7 MH1PS8 MH1PT2 MH1PT3 MH1PT4		5000 U
ICB	Silver	2.015	MH1PS4		10.0 U

8. FORM 4 - ICP INTERFERENCE CHECK SAMPLE

The ICP interference check sample (ICS) was run at the beginning and end of each sample analysis run and every 20 analytical samples, but not prior to the ICV.

Yes_X_ No____

Comments: None.

Percent recovery of the analytes in the ICS solutions were within the range of 80-120% or the result was within ±2x the CRQL.

Yes_X_ No____

Comments: None.

Sample results for aluminum, calcium, iron, and magnesium were less than the ICSA values.

Yes___ No_X_

Comments: The following sample results were qualified because the results for calcium were greater than the ICSA values and the absolute values of the associated elements were greater than the MDL in the ICSA analysis:

Element	ICSA Result (ug/L)	MDL (ug/L)	Samples Affected	Qualifiers
Selenium	-16.8 / -5.1	4.7	MH1PR6, MH1PS4, MH1PT1	UJ
Thallium	-19.8 / -1.2	6.7		
Beryllium	0.55 / 0.69	0.063		J+
Arsenic	5.2	4.9	MH1PS4, MH1PT1	
Potassium	164	19.1	MH1PS4	
Silver	1.5	1.1		

The results for beryllium in samples MH1PR6, MH1PS4, and MH1PT1; arsenic in samples MH1PS4 and MH1PT1; and potassium and silver in sample MH1PS4 were not assigned bias because the results were qualified as non-detected for blank contamination.

9. FORM 5A - MATRIX SPIKE SAMPLE ANALYSIS

A matrix spike sample was analyzed with every twenty or fewer samples of a similar matrix, or one per sample delivery group (whichever is more frequent).

Yes_X_ No___ NA___

Comments: None.

The percent recoveries (%Rs) were calculated correctly.

Yes_X_ No___ NA___

Comments: None.

Spike recoveries were within the range of 75-125% (an exception is granted where the sample concentration is four times the spike concentration).

Yes_X_ No___

Comments: None.

10. FORM 5B - POST DIGEST SPIKE RECOVERY

A post-digest spike was performed for those elements that did not meet the specified criteria (i.e., Pre-digestion/pre-distillation spike recovery falls outside of control limits and sample result is less than four times the spike amount added, exception: Ag, Hg).

Yes___ No___ NA_X_

Comments: None.

11. FORM 6 - DUPLICATE SAMPLE ANALYSIS

Duplicate sample analysis was performed with every twenty or fewer samples of a similar matrix, or one per sample delivery group (whichever is more frequent).

Yes_X_ No___ NA___

Comments: None.

The RPDs were calculated correctly.

Yes_X_ No___ NA___

Comments: None.

For sample concentrations greater than five times the CRQL, RPDs were within ±20% (limits of ±35% apply for soil/sediments/tailings samples).

Yes_X_ No___ NA___

Comments: None.

For sample concentrations less than five times the CRQL, duplicate analysis results were within the control window of ± CRQL (two times CRQL for soils).

Yes_X_ No___ NA___

Comments: None.

12. ICP-MS

Comments: ICP-MS analyses were not performed on these samples.

13. FORM 7 - LABORATORY CONTROL SAMPLE

The laboratory control sample (LCS) was prepared and analyzed with every twenty or fewer samples of a similar matrix, or one per sample delivery group (whichever is more frequent).

Yes_X_ No____

Comments: None.

All results were within control limits.

Yes_X_ No____

Comments: Results were within laboratory control limits.

14. FORM 8 - ICP-AES QC

A serial dilution was performed for ICP analysis with every twenty or fewer samples of a similar matrix, or one per sample delivery group, whichever is more frequent.

Yes_X_ No____

Comments: None.

The serial dilution was without interference problems as defined by the SOW.

Yes___ No_X_

Comments: The following serial dilution %Ds were greater than 10% and the original sample result was at least 50* the MDL:

Element	% Difference	Samples Affected	Qualifiers
Aluminum	22%	All samples	J/UJ
Potassium	14%		
Sodium	28%		
Zinc	11%		

15. FORM 9 - ANNUAL METHOD DETECTION LIMITS (MDL)

MDLs were provided for all elements on the target analyte list.

Yes_X_ No____

Comments: None.

Reported MDLs met SOW requirements.

Yes_X_ No____

Comments: None.

16. FORM 10 - INTERELEMENT CORRECTION FACTORS FOR ICP

Interelement corrections for ICP were reported.

Yes_X_ No____

Comments: None.

17. FORM 11 - ICP LINEAR RANGES

ICP linear ranges were reported.

Yes_X_ No____

Comments: None.

18. FORM 12 - PREPARATION LOG

Information on the preparation of samples for analysis was reported on Form 12.

Yes_X_ No____

Comments: None.

19. FORM 13 - ANALYSIS RUN LOG

A Form 13 with the required information was filled out for each analysis run in the data package.

Yes_X_ No____

Comments: None.

20. Additional Comments or Problems/Resolutions Not Addressed Above

Yes___ No_X_

Comments: None.

INORGANIC DATA QUALITY ASSURANCE REVIEW

Region VIII

DATA QUALIFIER DEFINITIONS

For the purpose of Data Validation, the following code letters and associated definitions are provided for use by the data validator to summarize the data quality. Use of additional qualifiers should be carefully considered. Definitions for all qualifiers used should be provided with each report.

GENERAL QUALIFIERS for use with both INORGANIC and ORGANIC DATA

R - Reported value is "rejected." The data are unusable. Resampling or reanalysis may be necessary to verify the presence or absence of the compound.

J - The associated numerical value is an estimated quantity and is the approximate concentration of the analyte in the sample.

J+ - The associated numerical value is an estimated quantity but the result may be biased high.

J- - The associated numerical value is an estimated quantity but the result may be biased low.

U J - The reported quantitation limit is estimated because Quality Control criteria were not met. Element or compound may or may not be present in the sample.

N J - Estimated value of a tentatively identified compound. (Identified with a CAS number.) ORGANICS analysis only.

U - The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

ACRONYMS

AA	Atomic Absorption
Ag	Silver
CCB	Continuing Calibration Blank
CCV	Continuing Calibration Verification
CFR	Code of Federal Regulations
CLP	Contract Laboratory Program
CRA	CRQL standard required for AA
CRQL	Contract Required Quantitation Limit
CRI	CRQL standard required for ICP
CV	Cold Vapor
EPA	U.S. Environmental Protection Agency
GFAA	Graphite Furnace Atomic Absorption
Hg	Mercury
ICB	Initial Calibration Blank
ICP	Inductively Coupled Plasma
ICS	Interference Check Sample
ICSA	Interference Check Sample (Solution A)
ICSAB	Interference Check Sample (Solution AB)
ICV	Initial Calibration Verification
LCS	Laboratory Control Sample
LRA	Linear Range Verification Analysis
MDL	Method Detection Limit
PDS	Post Digestion Spike
QC	Quality Control
RPD	Relative Percent Difference
RPM	Regional Project Manager
RSD	Percent Relative Standard Deviation
SA	Spike Added
SAS	Special Analytical Services
SDG	Sample Delivery Group
SOW	Statement of Work
SR	Sample Result
SSR	Spiked Sample Result

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1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1PR5

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1PR5

Matrix: (soil/water) WATER Lab Sample ID: X4829-01

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 0.0

Concentration Units (**ug/L** or **mg/kg** dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	200	U	E	P	UJ
7440-36-0	Antimony	16.2	J		P	60.0 U
7440-38-2	Arsenic	46.0			P	
7440-39-3	Barium	24.5	J		P	200 U
7440-41-7	Beryllium	0.25	J		P	5.0 U
7440-43-9	Cadmium	4.6	J		P	
7440-70-2	Calcium	216000			P	
7440-47-3	Chromium	5.7	J		P	
7440-48-4	Cobalt	1.4	J		P	
7440-50-8	Copper	10.4	J		P	25.0 U
7439-89-6	Iron	1620			P	
7439-92-1	Lead	20.7			P	U
7439-95-4	Magnesium	56900			P	
7439-96-5	Manganese	613			P	
7439-97-6	Mercury				NR	
7440-02-0	Nickel	7.3	J		P	40.0 U
7440-09-7	Potassium	4900	J	E	P	5000 U J
7782-49-2	Selenium	6.6	J		P	UJ
7440-22-4	Silver	10.0	U		P	
7440-23-5	Sodium	92600		E	P	J
7440-28-0	Thallium	25.0	U		P	
7440-62-2	Vanadium	50.0	U		P	
7440-66-6	Zinc	1160		E	P	J
57-12-5	Cyanide				NR	

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

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1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1PR6

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1PR5

Matrix: (soil/water) WATER Lab Sample ID: X4829-02

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 0.0

Concentration Units (**ug/L** or **mg/kg** dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	1350		E	P	J
7440-36-0	Antimony	42.0	J		P	60.0 J
7440-38-2	Arsenic	345			P	
7440-39-3	Barium	34.2	J		P	200 J
7440-41-7	Beryllium	0.77	J		P	5.0 J
7440-43-9	Cadmium	163			P	
7440-70-2	Calcium	316000			P	
7440-47-3	Chromium	4.1	J		P	
7440-48-4	Cobalt	51.7			P	
7440-50-8	Copper	217			P	
7439-89-6	Iron	39800			P	
7439-92-1	Lead	1280			P	
7439-95-4	Magnesium	52100			P	
7439-96-5	Manganese	2160			P	
7439-97-6	Mercury				NR	
7440-02-0	Nickel	71.6			P	
7440-09-7	Potassium	10900		E	P	J
7782-49-2	Selenium	35.0	U		P	UJ
7440-22-4	Silver	10.0	U		P	
7440-23-5	Sodium	38600		E	P	J
7440-28-0	Thallium	25.0	U		P	UJ
7440-62-2	Vanadium	6.6	J		P	
7440-66-6	Zinc	53000		ED	P	J
57-12-5	Cyanide				NR	

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

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1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1PR7

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1PR5

Matrix: (soil/water) WATER Lab Sample ID: X4829-03

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 0.0

Concentration Units (**ug/L** or **mg/kg** dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	200	U	E	P	UJ
7440-36-0	Antimony	35.5	J		P	60.0U
7440-38-2	Arsenic	13.6			P	U
7440-39-3	Barium	46.5	J		P	200U
7440-41-7	Beryllium	0.23	J		P	5.0U
7440-43-9	Cadmium	7.6			P	
7440-70-2	Calcium	200000			P	
7440-47-3	Chromium	5.7	J		P	
7440-48-4	Cobalt	50.0	U		P	
7440-50-8	Copper	14.9	J		P	25.0U
7439-89-6	Iron	273			P	
7439-92-1	Lead	6.3	J		P	10.0U
7439-95-4	Magnesium	48800			P	
7439-96-5	Manganese	151			P	
7439-97-6	Mercury				NR	
7440-02-0	Nickel	7.3	J		P	40.0U
7440-09-7	Potassium	3560	J	E	P	5000UJ
7782-49-2	Selenium	35.0	U		P	
7440-22-4	Silver	10.0	U		P	
7440-23-5	Sodium	81700		E	P	J
7440-28-0	Thallium	25.0	U		P	
7440-62-2	Vanadium	0.62	J		P	
7440-66-6	Zinc	2400		E	P	J
57-12-5	Cyanide				NR	

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

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1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1PR8

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1PR5

Matrix: (soil/water) WATER Lab Sample ID: X4829-04

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 0.0

Concentration Units (**ug/L** or **mg/kg** dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	200	U	E	P	UJ
7440-36-0	Antimony	34.5	J		P	60.0U
7440-38-2	Arsenic	5.4	J		P	10.0U
7440-39-3	Barium	44.2	J		P	200U
7440-41-7	Beryllium	0.23	J		P	5.0U
7440-43-9	Cadmium	6.8			P	
7440-70-2	Calcium	187000			P	
7440-47-3	Chromium	1.7	J		P	
7440-48-4	Cobalt	50.0	U		P	
7440-50-8	Copper	13.1	J		P	25.0U
7439-89-6	Iron	461			P	
7439-92-1	Lead	5.8	J		P	10.0U
7439-95-4	Magnesium	45800			P	
7439-96-5	Manganese	130			P	
7439-97-6	Mercury				NR	
7440-02-0	Nickel	3.8	J		P	40.0U
7440-09-7	Potassium	3270	J	E	P	5000UJ
7782-49-2	Selenium	35.0	U		P	
7440-22-4	Silver	10.0	U		P	
7440-23-5	Sodium	77300		E	P	J
7440-28-0	Thallium	25.0	U		P	
7440-62-2	Vanadium	0.76	J		P	
7440-66-6	Zinc	2190		E	P	J
57-12-5	Cyanide				NR	

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

JT 11/27/06

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1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1PR9

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1PR5

Matrix: (soil/water) WATER Lab Sample ID: X4829-05

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 0.0

Concentration Units (**ug/L** or **mg/kg** dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	200	U	E	P	UJ
7440-36-0	Antimony	19.6	J		P	60.0U
7440-38-2	Arsenic	13.3			P	U
7440-39-3	Barium	47.4	J		P	200U
7440-41-7	Beryllium	0.26	J		P	5.0U
7440-43-9	Cadmium	5.0	U		P	
7440-70-2	Calcium	155000			P	
7440-47-3	Chromium	5.5	J		P	
7440-48-4	Cobalt	50.0	U		P	
7440-50-8	Copper	6.6	J		P	25.0U
7439-89-6	Iron	232			P	
7439-92-1	Lead	4.0	J		P	10.0U
7439-95-4	Magnesium	38700			P	
7439-96-5	Manganese	56.1			P	
7439-97-6	Mercury				NR	
7440-02-0	Nickel	7.2	J		P	40.0U
7440-09-7	Potassium	3310	J	E	P	5000UJ
7782-49-2	Selenium	35.0	U		P	
7440-22-4	Silver	10.0	U		P	
7440-23-5	Sodium	73700		E	P	J
7440-28-0	Thallium	25.0	U		P	
7440-62-2	Vanadium	50.0	U		P	
7440-66-6	Zinc	334		E	P	J
57-12-5	Cyanide				NR	

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

11/27/06

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1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1PS0

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1PR5

Matrix: (soil/water) WATER Lab Sample ID: X4829-06

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 0.0

Concentration Units (**ug/L** or **mg/kg** dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	200	U	E	P	UJ
7440-36-0	Antimony	20.1	J		P	60.0UJ
7440-38-2	Arsenic	7.3	J		P	10.0UJ
7440-39-3	Barium	44.6	J		P	200UJ
7440-41-7	Beryllium	0.24	J		P	5.0UJ
7440-43-9	Cadmium	5.0	U		P	
7440-70-2	Calcium	154000			P	
7440-47-3	Chromium	12.9			P	
7440-48-4	Cobalt	50.0	U		P	
7440-50-8	Copper	8.6	J		P	25.0UJ
7439-89-6	Iron	239			P	
7439-92-1	Lead	10.0	U		P	
7439-95-4	Magnesium	38200			P	
7439-96-5	Manganese	82.5			P	
7439-97-6	Mercury				NR	
7440-02-0	Nickel	5.8	J		P	40.0UJ
7440-09-7	Potassium	3170	J	E	P	5000UJ
7782-49-2	Selenium	35.0	U		P	
7440-22-4	Silver	10.0	U		P	
7440-23-5	Sodium	71200		E	P	J
7440-28-0	Thallium	25.0	U		P	
7440-62-2	Vanadium	0.62	J		P	
7440-66-6	Zinc	359		E	P	J
57-12-5	Cyanide				NR	

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

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1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1PS1

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1PR5

Matrix: (soil/water) WATER Lab Sample ID: X4829-07

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 0.0

Concentration Units (**ug/L** or **mg/kg** dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	200	U	E	P	UJ
7440-36-0	Antimony	46.7	J		P	UJ
7440-38-2	Arsenic	11.3			P	U
7440-39-3	Barium	37.2	J		P	200 U
7440-41-7	Beryllium	0.24	J		P	5.0 U
7440-43-9	Cadmium	9.0			P	
7440-70-2	Calcium	165000			P	
7440-47-3	Chromium	14.0			P	
7440-48-4	Cobalt	50.0	U		P	
7440-50-8	Copper	11.9	J		P	25.0 U
7439-89-6	Iron	263			P	
7439-92-1	Lead	10.5			P	U
7439-95-4	Magnesium	40200			P	
7439-96-5	Manganese	130			P	
7439-97-6	Mercury				NR	
7440-02-0	Nickel	8.1	J		P	40.0 U
7440-09-7	Potassium	2480	J	E	P	5000 UJ
7782-49-2	Selenium	35.0	U		P	
7440-22-4	Silver	10.0	U		P	
7440-23-5	Sodium	68500		E	P	J
7440-28-0	Thallium	25.0	U		P	
7440-62-2	Vanadium	0.60	J		P	
7440-66-6	Zinc	2290		E	P	J
57-12-5	Cyanide				NR	

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

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JT 11/27/06

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1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1PS2

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1PR5

Matrix: (soil/water) WATER Lab Sample ID: X4829-08

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 0.0

Concentration Units (**ug/L** or **mg/kg** dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	200	U	E	P	UJ
7440-36-0	Antimony	45.5	J		P	60.0 J
7440-38-2	Arsenic	8.5	J		P	10.0 J
7440-39-3	Barium	45.6	J		P	200 J
7440-41-7	Beryllium	0.21	J		P	5.0 J
7440-43-9	Cadmium	4.0	J		P	
7440-70-2	Calcium	223000			P	
7440-47-3	Chromium	48.1			P	
7440-48-4	Cobalt	50.0	U		P	
7440-50-8	Copper	10.8	J		P	25.0 J
7439-89-6	Iron	648			P	
7439-92-1	Lead	7.4	J		P	10.0 J
7439-95-4	Magnesium	54000			P	
7439-96-5	Manganese	152			P	
7439-97-6	Mercury				NR	
7440-02-0	Nickel	17.7	J		P	40.0 J
7440-09-7	Potassium	2620	J	E	P	5000 J
7782-49-2	Selenium	35.0	U		P	
7440-22-4	Silver	10.0	U		P	
7440-23-5	Sodium	82800		E	P	J
7440-28-0	Thallium	25.0	U		P	
7440-62-2	Vanadium	50.0	U		P	
7440-66-6	Zinc	1420		E	P	J
57-12-5	Cyanide				NR	

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

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USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1PS3

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1PR5

Matrix: (soil/water) WATER Lab Sample ID: X4829-09

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 0.0

Concentration Units (**ug/L** or **mg/kg** dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	200	U	E	P	UJ
7440-36-0	Antimony	41.0	J		P	60.0U
7440-38-2	Arsenic	20.4			P	U
7440-39-3	Barium	45.9	J		P	200U
7440-41-7	Beryllium	0.25	J		P	5.0U
7440-43-9	Cadmium	5.6			P	
7440-70-2	Calcium	212000			P	
7440-47-3	Chromium	5.7	J		P	
7440-48-4	Cobalt	50.0	U		P	
7440-50-8	Copper	21.3	J		P	25.0U
7439-89-6	Iron	1180			P	
7439-92-1	Lead	92.0			P	
7439-95-4	Magnesium	53000			P	
7439-96-5	Manganese	261			P	
7439-97-6	Mercury				NR	
7440-02-0	Nickel	33.9	J		P	40.0U
7440-09-7	Potassium	2930	J	E	P	5000UJ
7782-49-2	Selenium	35.0	U		P	
7440-22-4	Silver	10.0	U		P	
7440-23-5	Sodium	85500		E	P	J
7440-28-0	Thallium	25.0	U		P	
7440-62-2	Vanadium	50.0	U		P	
7440-66-6	Zinc	1890		E	P	J
57-12-5	Cyanide				NR	

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

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JT 11/27/06

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1PS4

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1PR5

Matrix: (soil/water) WATER Lab Sample ID: X4829-10

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 0.0

Concentration Units (**ug/L** or **mg/kg** dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	71.1	J	E	P	J-
7440-36-0	Antimony	6.6	J		P	60.0U
7440-38-2	Arsenic	20.3			P	UJ
7440-39-3	Barium	67.7	J		P	200U
7440-41-7	Beryllium	0.27	J		P	5.0UJ
7440-43-9	Cadmium	0.63	J		P	
7440-70-2	Calcium	265000			P	
7440-47-3	Chromium	30.9			P	
7440-48-4	Cobalt	2.9	J		P	
7440-50-8	Copper	11.3	J		P	25.0U
7439-89-6	Iron	3610			P	
7439-92-1	Lead	16.0			P	U
7439-95-4	Magnesium	58400			P	
7439-96-5	Manganese	947			P	
7439-97-6	Mercury				NR	
7440-02-0	Nickel	12.2	J		P	40.0U
7440-09-7	Potassium	1210	J	E	P	5000UJ
7782-49-2	Selenium	35.0	U		P	UJ
7440-22-4	Silver	3.2	J		P	10.0UJ
7440-23-5	Sodium	70100		E	P	J
7440-28-0	Thallium	25.0	U		P	UJ
7440-62-2	Vanadium	2.1	J		P	
7440-66-6	Zinc	233		E	P	J
57-12-5	Cyanide				NR	

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

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1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1PS5

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1PR5

Matrix: (soil/water) WATER Lab Sample ID: X4829-11

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 0.0

Concentration Units (**ug/L** or **mg/kg** dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	200	U	E	P	UJ
7440-36-0	Antimony	29.9	J		P	60.0U
7440-38-2	Arsenic	10.1			P	U
7440-39-3	Barium	38.3	J		P	200U
7440-41-7	Beryllium	0.25	J		P	5.0U
7440-43-9	Cadmium	7.7			P	
7440-70-2	Calcium	216000			P	
7440-47-3	Chromium	1.3	J		P	
7440-48-4	Cobalt	50.0	U		P	
7440-50-8	Copper	15.1	J		P	25.0U
7439-89-6	Iron	274			P	
7439-92-1	Lead	23.1			P	U
7439-95-4	Magnesium	54400			P	
7439-96-5	Manganese	267			P	
7439-97-6	Mercury				NR	
7440-02-0	Nickel	6.1	J		P	40.0U
7440-09-7	Potassium	5770		E	P	J
7782-49-2	Selenium	35.0	U		P	
7440-22-4	Silver	10.0	U		P	
7440-23-5	Sodium	80100		E	P	J
7440-28-0	Thallium	25.0	U		P	
7440-62-2	Vanadium	0.50	J		P	
7440-66-6	Zinc	2450		E	P	J
57-12-5	Cyanide				NR	

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

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USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1PS6

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1PR5

Matrix: (soil/water) WATER Lab Sample ID: X4829-12

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 0.0

Concentration Units (**ug/L** or **mg/kg** dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	200	U	E	P	UJ
7440-36-0	Antimony	25.6	J		P	60.0 U
7440-38-2	Arsenic	9.1	J		P	10.0 U
7440-39-3	Barium	34.5	J		P	200 U
7440-41-7	Beryllium	0.26	J		P	5.0 U
7440-43-9	Cadmium	8.0			P	
7440-70-2	Calcium	185000			P	
7440-47-3	Chromium	3.0	J		P	
7440-48-4	Cobalt	50.0	U		P	
7440-50-8	Copper	12.2	J		P	25.0 U
7439-89-6	Iron	206			P	
7439-92-1	Lead	22.1			P	J
7439-95-4	Magnesium	46500			P	
7439-96-5	Manganese	112			P	
7439-97-6	Mercury				NR	
7440-02-0	Nickel	6.9	J		P	40.0 U
7440-09-7	Potassium	5990		E	P	J
7782-49-2	Selenium	35.0	U		P	
7440-22-4	Silver	10.0	U		P	
7440-23-5	Sodium	68800		E	P	J
7440-28-0	Thallium	25.0	U		P	
7440-62-2	Vanadium	0.77	J		P	
7440-66-6	Zinc	2020		E	P	J
57-12-5	Cyanide				NR	

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

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USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1PS7

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1PR5

Matrix: (soil/water) WATER Lab Sample ID: X4829-13

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 0.0

Concentration Units (**ug/L** or **mg/kg** dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	200	U	E	P	UJ
7440-36-0	Antimony	13.6	J		P	60.0U
7440-38-2	Arsenic	10.0	U		P	
7440-39-3	Barium	39.9	J		P	200U
7440-41-7	Beryllium	0.29	J		P	5.0U
7440-43-9	Cadmium	3.1	J		P	
7440-70-2	Calcium	125000			P	
7440-47-3	Chromium	11.8			P	
7440-48-4	Cobalt	50.0	U		P	
7440-50-8	Copper	10.0	J		P	25.0U
7439-89-6	Iron	202			P	
7439-92-1	Lead	7.3	J		P	10.0U
7439-95-4	Magnesium	32200			P	
7439-96-5	Manganese	69.9			P	
7439-97-6	Mercury				NR	
7440-02-0	Nickel	24.5	J		P	40.0U
7440-09-7	Potassium	3160	J	E	P	5000UJ
7782-49-2	Selenium	35.0	U		P	
7440-22-4	Silver	10.0	U		P	
7440-23-5	Sodium	46000		E	P	J
7440-28-0	Thallium	25.0	U		P	
7440-62-2	Vanadium	0.83	J		P	
7440-66-6	Zinc	1350		E	P	J
57-12-5	Cyanide				NR	

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

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1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1PS8

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1PR5

Matrix: (soil/water) WATER Lab Sample ID: X4829-14

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 0.0

Concentration Units (**ug/L** or **mg/kg** dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	27.5	J	E	P	J-
7440-36-0	Antimony	11.9	J		P	60.0 U
7440-38-2	Arsenic	11.8			P	U
7440-39-3	Barium	53.3	J		P	200 U
7440-41-7	Beryllium	0.30	J		P	5.0 U
7440-43-9	Cadmium	2.3	J		P	
7440-70-2	Calcium	128000			P	
7440-47-3	Chromium	4.7	J		P	
7440-48-4	Cobalt	50.0	U		P	
7440-50-8	Copper	11.5	J		P	25 U
7439-89-6	Iron	487			P	
7439-92-1	Lead	85.0			P	
7439-95-4	Magnesium	31800			P	
7439-96-5	Manganese	243			P	
7439-97-6	Mercury				NR	
7440-02-0	Nickel	4.4	J		P	40.0 U
7440-09-7	Potassium	2840	J	E	P	5000 J
7782-49-2	Selenium	35.0	U		P	
7440-22-4	Silver	10.0	U		P	
7440-23-5	Sodium	55300		E	P	J
7440-28-0	Thallium	25.0	U		P	
7440-62-2	Vanadium	0.91	J		P	
7440-66-6	Zinc	637		E	P	J
57-12-5	Cyanide				NR	

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1PS9

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1PR5

Matrix: (soil/water) WATER Lab Sample ID: X4829-15

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 0.0

Concentration Units (**ug/L** or **mg/kg** dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	200	U	E	P	UJ
7440-36-0	Antimony	21.6	J		P	60.0U
7440-38-2	Arsenic	6.9	J		P	10.0U
7440-39-3	Barium	44.0	J		P	200U
7440-41-7	Beryllium	0.33	J		P	5.0U
7440-43-9	Cadmium	15.3			P	
7440-70-2	Calcium	177000			P	
7440-47-3	Chromium	2.5	J		P	
7440-48-4	Cobalt	2.7	J		P	
7440-50-8	Copper	17.6	J		P	25.0U
7439-89-6	Iron	427			P	
7439-92-1	Lead	14.0			P	U
7439-95-4	Magnesium	43300			P	
7439-96-5	Manganese	433			P	
7439-97-6	Mercury				NR	
7440-02-0	Nickel	7.9	J		P	~~40.0U~~
7440-09-7	Potassium	6200		E	P	J
7782-49-2	Selenium	35.0	U		P	
7440-22-4	Silver	10.0	U		P	
7440-23-5	Sodium	113000		E	P	J
7440-28-0	Thallium	25.0	U		P	
7440-62-2	Vanadium	0.69	J		P	
7440-66-6	Zinc	2290		E	P	J
57-12-5	Cyanide				NR	

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

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1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1PT0

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1PR5

Matrix: (soil/water) WATER Lab Sample ID: X4829-16

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 0.0

Concentration Units (**ug/L** or **mg/kg** dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	200	U	E	P
7440-36-0	Antimony	14.8	J		P
7440-38-2	Arsenic	10.0	U		P
7440-39-3	Barium	38.6	J		P
7440-41-7	Beryllium	0.46	J		P
7440-43-9	Cadmium	9.3			P
7440-70-2	Calcium	162000			P
7440-47-3	Chromium	15.9			P
7440-48-4	Cobalt	5.3	J		P
7440-50-8	Copper	12.3	J		P
7439-89-6	Iron	1950			P
7439-92-1	Lead	11.9			P
7439-95-4	Magnesium	40900			P
7439-96-5	Manganese	607			P
7439-97-6	Mercury				NR
7440-02-0	Nickel	12.6	J		P
7440-09-7	Potassium	5880		E	P
7782-49-2	Selenium	35.0	U		P
7440-22-4	Silver	10.0	U		P
7440-23-5	Sodium	117000		E	P
7440-28-0	Thallium	25.0	U		P
7440-62-2	Vanadium	0.81	J		P
7440-66-6	Zinc	2160		E	P
57-12-5	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

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1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1PT1

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1PR5

Matrix: (soil/water) WATER Lab Sample ID: X4829-17

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 0.0

Concentration Units (**ug/L** or **mg/kg** dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	869		E	P	J
7440-36-0	Antimony	9.0	J		P	UJ
7440-38-2	Arsenic	12.3			P	
7440-39-3	Barium	699			P	
7440-41-7	Beryllium	0.52	J		P	UJ
7440-43-9	Cadmium	0.99	J		P	
7440-70-2	Calcium	265000			P	
7440-47-3	Chromium	2.7	J		P	
7440-48-4	Cobalt	2.9	J		P	
7440-50-8	Copper	26.4			P	
7439-89-6	Iron	2520			P	
7439-92-1	Lead	177			P	
7439-95-4	Magnesium	70300			P	
7439-96-5	Manganese	2720			P	
7439-97-6	Mercury				NR	
7440-02-0	Nickel	5.3	J		P	
7440-09-7	Potassium	20800		E	P	J
7782-49-2	Selenium	35.0	U		P	UJ
7440-22-4	Silver	10.0	U		P	
7440-23-5	Sodium	150000		E	P	J
7440-28-0	Thallium	25.0	U		P	UJ
7440-62-2	Vanadium	7.9	J		P	
7440-66-6	Zinc	248		E	P	J
57-12-5	Cyanide				NR	

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

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1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1PT2

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1PR5

Matrix: (soil/water) WATER Lab Sample ID: X4829-20

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 0.0

Concentration Units (**ug/L** or **mg/kg** dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	200	U	E	P	UJ
7440-36-0	Antimony	17.1	J		P	60.0 J
7440-38-2	Arsenic	13.9			P	U
7440-39-3	Barium	53.8	J		P	200 U
7440-41-7	Beryllium	0.34	J		P	5.0 J
7440-43-9	Cadmium	1.7	J		P	
7440-70-2	Calcium	125000			P	
7440-47-3	Chromium	1.2	J		P	
7440-48-4	Cobalt	50.0	U		P	
7440-50-8	Copper	3.0	J		P	25.0 U
7439-89-6	Iron	396			P	
7439-92-1	Lead	17.1			P	U
7439-95-4	Magnesium	32200			P	
7439-96-5	Manganese	98.3			P	
7439-97-6	Mercury				NR	
7440-02-0	Nickel	2.9	J		P	~~40.0 U~~
7440-09-7	Potassium	3460	J	E	P	5000 J
7782-49-2	Selenium	35.0	U		P	
7440-22-4	Silver	10.0	U		P	
7440-23-5	Sodium	58000		E	P	J
7440-28-0	Thallium	25.0	U		P	
7440-62-2	Vanadium	50.0	U		P	
7440-66-6	Zinc	421		E	P	J
57-12-5	Cyanide				NR	

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

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UJ 11/27/06

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1PT3

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1PR5

Matrix: (soil/water) WATER Lab Sample ID: X4829-21

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 0.0

Concentration Units (**ug/L** or **mg/kg** dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	200	U	E	P	UJ
7440-36-0	Antimony	15.8	J		P	60.0 U
7440-38-2	Arsenic	6.7	J		P	10.0 U
7440-39-3	Barium	22.9	J		P	200 U
7440-41-7	Beryllium	0.39	J		P	5.0 U
7440-43-9	Cadmium	16.5			P	
7440-70-2	Calcium	165000			P	
7440-47-3	Chromium	2.9	J		P	
7440-48-4	Cobalt	1.3	J		P	
7440-50-8	Copper	12.5	J		P	25.0 U
7439-89-6	Iron	100			P	U
7439-92-1	Lead	10.0	U		P	
7439-95-4	Magnesium	33000			P	
7439-96-5	Manganese	1490			P	
7439-97-6	Mercury				NR	
7440-02-0	Nickel	5.5	J		P	~~40.0 J~~
7440-09-7	Potassium	4290	J	E	P	5000 J
7782-49-2	Selenium	35.0	U		P	
7440-22-4	Silver	10.0	U		P	
7440-23-5	Sodium	72700		E	P	J
7440-28-0	Thallium	25.0	U		P	
7440-62-2	Vanadium	0.52	J		P	
7440-66-6	Zinc	4480		E	P	J
57-12-5	Cyanide				NR	

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

J 11/27/06

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1PT4

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1PR5

Matrix: (soil/water) WATER Lab Sample ID: X4829-22

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 0.0

Concentration Units (**ug/L** or **mg/kg** dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	200	U	E	P	UJ
7440-36-0	Antimony	13.4	J		P	60.0U
7440-38-2	Arsenic	8.3	J		P	10.0U
7440-39-3	Barium	49.9	J		P	200U
7440-41-7	Beryllium	0.41	J		P	5.0U
7440-43-9	Cadmium	1.6	J		P	
7440-70-2	Calcium	126000			P	
7440-47-3	Chromium	18.1			P	
7440-48-4	Cobalt	50.0	U		P	
7440-50-8	Copper	12.4	J		P	25.0U
7439-89-6	Iron	363			P	
7439-92-1	Lead	34.0			P	
7439-95-4	Magnesium	30400			P	
7439-96-5	Manganese	198			P	
7439-97-6	Mercury				NR	
7440-02-0	Nickel	13.2	J		P	~~40.0U~~
7440-09-7	Potassium	3010	J	E	P	5000UJ
7782-49-2	Selenium	35.0	U		P	
7440-22-4	Silver	10.0	U		P	
7440-23-5	Sodium	58600		E	P	J
7440-28-0	Thallium	25.0	U		P	
7440-62-2	Vanadium	0.65	J		P	
7440-66-6	Zinc	499		E	P	J
57-12-5	Cyanide				NR	

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

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UT 11/27/06

REGION VIII
DATA VALIDATION REPORT
INORGANIC

Case No. / TDD No.	Site Name		Operable Unit
35810 / 0611-06	Lower Silver Creek		
RPM/OSC Name			
Sabrina Forrest			
Contractor Laboratory	**Contract No.**	**SDG No.**	**Laboratory DPO/Region**
ChemTech Consulting Group	EPW06047	MH1PR2	

Review Assigned Date November 16, 2006
Review Completion Date November 30, 2006

Data Validator Lisa Tyson
Report Reviewer Amy Ballow

Sample ID	Matrix	Analysis
MH1PR2	Soil	CLP – Total Metals
MH1PR3		
MH1PR4		
MH1PT5	Water	
MH1PT6		
MH1PT7		
MH1W55		CLP - Dissolved Metals
MH1W56		
MH1W57		

DATA QUALITY STATEMENT

( ) Data are ACCEPTABLE according to EPA Functional guidelines with no qualifiers (flags) added by the reviewer.
( ) Data are UNACCEPTABLE according to EPA Functional Guidelines.
(X) Data are acceptable with QUALIFICATIONS noted in review.

Telephone/Communication Logs Enclosed? Yes _____ No ___X_____

CLP Project Officer Attention Required? Yes _____ No ___X___ If yes, list the items that require attention:

INORGANIC DATA VALIDATION REPORT

REVIEW NARRATIVE SUMMARY

This data package was reviewed according to "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review," October 2004.

Raw data were reviewed for completeness and transcription accuracy onto the summary forms. Approximately 10-20% of the results reported in each of the samples, calibrations, and QC analyses were recalculated and verified. If problems were identified during the recalculation of results, a more thorough calculation check was performed.

The data package, Case No. 35810, SDG No. MH1PR2, consisted of three soil samples and three water samples for CLP total metals, and three water samples for CLP dissolved metals by ICP-AES (ILM05.3). The following table lists the data qualifiers added to the sample analyses. Please see Data Qualifier Definitions, attached to the end of this report.

Sample ID	Elements	Qualifiers	Reason for Qualification	Review Section
MH1PR2, MH1PR3, MH1PR4	Beryllium Sodium	U	Laboratory blank contamination	7
MH1PR4	Potassium Vanadium			
MH1PT5, MH1PT6, MH1PT7, MH1W55, MH1W57	Aluminum Copper			
MH1PT5, MH1PT6, MH1PT7, MH1W55, MH1W56, MH1W57	Antimony Barium Beryllium Potassium			
MH1PT6, MH1W56, MH1W57	Arsenic			
MH1PT5, MH1PT6, MH1PT7, MH1W57	Lead			
MH1W55	Iron			
MH1W56	Silver			
MH1PT7	Thallium			
MH1PR3	Selenium	UJ	Interference check exceeded criteria, negative interference	8
MH1PR2, MH1PR3, MH1PR4	Beryllium* Sodium*	J+	Interference check exceeded criteria, positive interference	
MH1PR3	Silver			

Sample ID	Elements	Qualifiers	Reason for Qualification	Review Section
MH1PR4	Thallium	J	Matrix spike recovery greater than 125%, but post digestion recovery within criteria	9
All samples	Potassium Zinc	J/UJ	Serial dilution %D greater than 10% and original sample value at least 50*IDL	14
MH1PT5, MH1PT6, MH1PT7, MH1W55, MH1W56, MH1W57	Barium			
MH1PR2, MH1PR3, MH1PR4	Antimony Arsenic Cadmium Calcium Cobalt Iron Lead Magnesium Manganese Nickel Silver Sodium			

* The results for beryllium and sodium in samples MH1PR2, MH1PR3, and MH1PR4 were not assigned bias because the results were qualified as non-detected for blank contamination.

1. DELIVERABLES

All deliverables were present as specified in the Statement of Work.

Yes_X_ No____

Comments: None.

2. HOLDING TIMES AND PRESERVATION CRITERIA

All technical holding times and preservation criteria were met.

Yes_X_ No____

Comments: The samples were analyzed within holding times and were received within the recommended temperature range of 4 ± 2°C. Chain-of-custody (COC), summary forms, and raw data were evaluated.

The sampler used the same ID for both total and dissolved metals. In accordance with previous direction from EPA Region 8, the sample IDs listed on the COC were assigned to the total metals samples and the SMO Coordinator assigned new IDs for the dissolved metals samples (i.e., the original sample number on the COC was MH1PT5 and the new dissolved sample ID was assigned as MH1W55).

3. INSTRUMENT CALIBRATIONS: STANDARDS AND BLANKS

Initial instrument calibrations were performed according to SOW requirements.

Yes_X_ No____

Comments: None.

The instruments were calibrated daily and each time an analysis run was performed.

Yes_X_ No____

Comments: None.

The instruments were calibrated using one blank and the appropriate number of standards.

Yes_X_ No____

Comments: None.

4. FORM 1 - SAMPLE ANALYSIS RESULTS

Sample analyses were entered correctly on Form Is.

Yes_X_ No____

Comments: The result for zinc in sample MH1PR2 was reported from a 2x dilution and the result for iron in sample MH1PR4 was reported from a 5x dilution. The laboratory flagged these results with a "D" qualifier.

5. FORM 2A - INITIAL AND CONTINUING CALIBRATION VERIFICATION

The initial and continuing calibration verification standards (ICV and CCV, respectively) met SOW requirements.

Yes_X_ No____

Comments: None.

The calibration verification results were within 90-110% recovery for metals, 85-115% for cyanide, and 80-120% for mercury.

Yes_X_ No____

Comments: None.

The continuing calibration standards were run at 10% frequency or every two hours.

Yes_X_ No____

Comments: None.

6. FORM 2B - CRQL CHECK STANDARD

ICP Analysis: Standards (CRI) were analyzed at the beginning and end of each sample analysis run and every 20 analytical samples, immediately preceding the interferences check sample analyses, but not before ICV analysis.

Yes_X_ No____

Comments: None.

The CRI recoveries were within 70-130% (50-150% for Sb, Pb, and Tl) for required elements.

Yes_X_ No____

Comments: None.

7. FORM 3 - BLANKS

The initial and continuing calibration blanks (ICB and CCB, respectively) met SOW requirements.

Yes_X_ No____

Comments: None.

The continuing calibration blanks were run at 10% frequency.

Yes_X_ No____

Comments: Continuing calibration blanks were run every 10 samples.

A laboratory/preparation blank was run at the frequency of one per twenty samples, or per sample delivery group (whichever is more frequent), and for each matrix analyzed.

Yes_X_ No____

Comments: None.

All analyzed blanks were free of contamination.

Yes____ No_X_

Comments: The following table lists the blanks with contamination that resulted in sample qualification, elements present, affected samples, and data qualifiers:

Blank Contaminants

Blank ID	Contaminant	Concentration Found in Blank	Associated Samples	Concentration Found in Sample	Qualifier/ Adjustment
PB	Beryllium	0.038 mg/Kg	MH1PR2 MH1PR3 MH1PR4	<CRQL	0.80 U 0.69 U 0.71 U
PB	Sodium	2.094 mg/Kg	MH1PR2 MH1PR3 MH1PR4		805 U 695 U 710 U

Blank ID	Contaminant	Concentration Found in Blank	Associated Samples	Concentration Found in Sample	Qualifier/ Adjustment
PB	Potassium	12.658 mg/Kg	MH1PR4	<CRQL	710 U
PB	Vanadium	0.107 mg/Kg	MH1PR4		7.1 U
CCB9	Aluminum	20.095 ug/L	MH1PT5 MH1PT6 MH1PT7 MH1W55 MH1W57		200 U
CCB10	Antimony	10.715 ug/L	MH1PT5 MH1PT6 MH1PT7 MH1W55 MH1W56 MH1W57		60.0 U
PB	Arsenic	9.015 ug/L	MH1PT6 MH1W56 MH1W57	<CRQL 31.5 ug/L <CRQL	10.0 U U 10.0 U
CCB10	Barium	0.87 ug/L	MH1PT5 MH1PT6 MH1PT7 MH1W55 MH1W56 MH1W57	<CRQL	200 U
CCB10	Beryllium	0.12 ug/L	MH1PT5 MH1PT6 MH1PT7 MH1W55 MH1W56 MH1W57		5.0 U
CCB9	Copper	1.965 ug/L	MH1PT5 MH1PT6 MH1PT7 MH1W55 MH1W57		25.0 U
PB	Iron	30.685 ug/L	MH1W55		100 U
PB	Lead	6.835 ug/L	MH1PT5 MH1PT6 MH1PT7 MH1W57	21.5 ug/L <CRQL 11.3 ug/L <CRQL	U 10.0 U U 10.0 U
PB	Potassium	29.545 ug/L	MH1PT5 MH1PT6 MH1PT7 MH1W55 MH1W56 MH1W57	<CRQL	5000 U
ICB	Silver	2.015 ug/L	MH1W56		10.0 U
CCB10	Thallium	6.755 ug/L	MH1PT7		25.0 U

8. FORM 4 - ICP INTERFERENCE CHECK SAMPLE

The ICP interference check sample (ICS) was run at the beginning and end of each sample analysis run and every 20 analytical samples, but not prior to the ICV.

Yes_X_ No____

Comments: None.

Percent recovery of the analytes in the ICS solutions were within the range of 80-120% or the result was within ±2x the CRQL.

Yes_X_ No____

Comments: None.

Sample results for aluminum, calcium, iron, and magnesium were less than the ICSA values.

Yes____ No_X_

Comments: The following sample results were qualified because the results for iron were greater than the ICSA values and the absolute values of the associated elements were greater than the MDL in the ICSA analysis:

Element	ICSA Result (ug/L)	MDL (ug/L)	Samples Affected	Qualifiers
Selenium	-5.2	4.7	MH1PR3	UJ
Beryllium	0.69	0.063	MH1PR2, MH1PR3, MH1PR4	J+
Sodium	890	8.8		
Silver	4.9	1.1	MH1PR3	

The results for beryllium and sodium in samples MH1PR2, MH1PR3, and MH1PR4 were not assigned bias because the results were qualified as non-detected for blank contamination.

9. FORM 5A - MATRIX SPIKE SAMPLE ANALYSIS

A matrix spike sample was analyzed with every twenty or fewer samples of a similar matrix, or one per sample delivery group (whichever is more frequent).

Yes_X_ No___ NA____

Comments: None.

The percent recoveries (%Rs) were calculated correctly.

Yes_X_ No___ NA___

Comments: None.

Spike recoveries were within the range of 75-125% (an exception is granted where the sample concentration is four times the spike concentration).

Yes___ No_X_

Comments: The following table lists the spike recovery outside control limits, post digestion spike recovery, samples affected, and data qualifiers:

Element	Matrix Spike %R	Post-Digestion %R	Samples Affected	Qualifiers
Thallium	151%	87%	MH1PR4	J

The percent recovery for selenium was also above criteria in the total water analysis; however, no qualification was necessary because detected results for selenium were not reported in the total water samples.

10. FORM 5B - POST DIGEST SPIKE RECOVERY

A post-digest spike was performed for those elements that did not meet the specified criteria (i.e., Pre-digestion/pre-distillation spike recovery falls outside of control limits and sample result is less than four times the spike amount added, exception: Ag, Hg).

Yes_X_ No___ NA___

Comments: See previous section for post-digestion spike recoveries.

11. FORM 6 - DUPLICATE SAMPLE ANALYSIS

Duplicate sample analysis was performed with every twenty or fewer samples of a similar matrix, or one per sample delivery group (whichever is more frequent).

Yes_X_ No___ NA___

Comments: None.

The RPDs were calculated correctly.

Yes_X_ No___ NA___

Comments: None.

For sample concentrations greater than five times the CRQL, RPDs were within ±20% (limits of ±35% apply for soil/sediments/tailings samples).

Yes_X_ No___ NA___

Comments: None.

For sample concentrations less than five times the CRQL, duplicate analysis results were within the control window of ± CRQL (two times CRQL for soils).

Yes_X_ No___ NA___

Comments: The laboratory indicated that thallium was outside duplicate criteria in the soil analysis. However, the duplicate analysis results were within the control window of ± 2x CRQL and no qualification was necessary.

12. ICP-MS

Comments: ICP-MS analyses were not performed on these samples.

13. FORM 7 - LABORATORY CONTROL SAMPLE

The laboratory control sample (LCS) was prepared and analyzed with every twenty or fewer samples of a similar matrix, or one per sample delivery group (whichever is more frequent).

Yes_X_ No___

Comments: None.

All results were within control limits.

Yes_X_ No___

Comments: Results were within laboratory control limits.

14. FORM 8 - ICP-AES QC

A serial dilution was performed for ICP analysis with every twenty or fewer samples of a similar matrix, or one per sample delivery group, whichever is more frequent.

Yes_X_ No____

Comments: None.

The serial dilution was without interference problems as defined by the SOW.

Yes___ No_X_

Comments: The following serial dilution %Ds were greater than 10% and the original sample result was at least 50* the MDL:

Element	% Difference	Samples Affected	Qualifiers
Potassium	14% / 11% / 15%	All samples	J/UJ
Zinc	31% / 12% / 13%		
Barium	11% / 10.3%	MH1PT5, MH1PT6, MH1PT7, MH1W55, MH1W56, MH1W57	
Antimony	11%	MH1PR2, MH1PR3, MH1PR4	
Arsenic	12%		
Cadmium	15%		
Calcium	11%		
Cobalt	12%		
Iron	429%		
Lead	15%		
Magnesium	13%		
Manganese	14%		
Nickel	16%		
Silver	14%		
Sodium	11%		

15. FORM 9 - ANNUAL METHOD DETECTION LIMITS (MDL)

MDLs were provided for all elements on the target analyte list.

Yes_X_ No____

Comments: None.

Reported MDLs met SOW requirements.

Yes_X_ No____

Comments: None.

16. FORM 10 - INTERELEMENT CORRECTION FACTORS FOR ICP

Interelement corrections for ICP were reported.

Yes_X_ No____

Comments: None.

17. FORM 11 - ICP LINEAR RANGES

ICP linear ranges were reported.

Yes_X_ No____

Comments: None.

18. FORM 12 - PREPARATION LOG

Information on the preparation of samples for analysis was reported on Form 12.

Yes_X_ No____

Comments: None.

19. FORM 13 - ANALYSIS RUN LOG

A Form 13 with the required information was filled out for each analysis run in the data package.

Yes_X_ No____

Comments: None.

20. Additional Comments or Problems/Resolutions Not Addressed Above

Yes___ No_X_

Comments: None.

INORGANIC DATA QUALITY ASSURANCE REVIEW

Region VIII

DATA QUALIFIER DEFINITIONS

For the purpose of Data Validation, the following code letters and associated definitions are provided for use by the data validator to summarize the data quality. Use of additional qualifiers should be carefully considered. Definitions for all qualifiers used should be provided with each report.

GENERAL QUALIFIERS for use with both INORGANIC and ORGANIC DATA

R - Reported value is "rejected." The data are unusable. Resampling or reanalysis may be necessary to verify the presence or absence of the compound.

J - The associated numerical value is an estimated quantity and is the approximate concentration of the analyte in the sample.

J+ - The associated numerical value is an estimated quantity but the result may be biased high.

J- - The associated numerical value is an estimated quantity but the result may be biased low.

U J - The reported quantitation limit is estimated because Quality Control criteria were not met. Element or compound may or may not be present in the sample.

N J - Estimated value of a tentatively identified compound. (Identified with a CAS number.) ORGANICS analysis only.

U - The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

ACRONYMS

AA	Atomic Absorption
Ag	Silver
CCB	Continuing Calibration Blank
CCV	Continuing Calibration Verification
CFR	Code of Federal Regulations
CLP	Contract Laboratory Program
CRA	CRQL standard required for AA
CRQL	Contract Required Quantitation Limit
CRI	CRQL standard required for ICP
CV	Cold Vapor
EPA	U.S. Environmental Protection Agency
GFAA	Graphite Furnace Atomic Absorption
Hg	Mercury
ICB	Initial Calibration Blank
ICP	Inductively Coupled Plasma
ICS	Interference Check Sample
ICSA	Interference Check Sample (Solution A)
ICSAB	Interference Check Sample (Solution AB)
ICV	Initial Calibration Verification
LCS	Laboratory Control Sample
LRA	Linear Range Verification Analysis
MDL	Method Detection Limit
PDS	Post Digestion Spike
QC	Quality Control
RPD	Relative Percent Difference
RPM	Regional Project Manager
RSD	Percent Relative Standard Deviation
SA	Spike Added
SAS	Special Analytical Services
SDG	Sample Delivery Group
SOW	Statement of Work
SR	Sample Result
SSR	Spiked Sample Result

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1PR2

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1PR2

Matrix: (soil/water) SOIL Lab Sample ID: X4830-01

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 62.1

Concentration Units (**ug/L** or **mg/kg** dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	6450			P	
7440-36-0	Antimony	103		E	P	J
7440-38-2	Arsenic	207		E	P	J
7440-39-3	Barium	191			P	
7440-41-7	Beryllium	0.11	J		P	0.50 J
7440-43-9	Cadmium	49.5		E	P	J
7440-70-2	Calcium	12200		E	P	J
7440-47-3	Chromium	19.3			P	
7440-48-4	Cobalt	18.0		E	P	J
7440-50-8	Copper	244			P	
7439-89-6	Iron	67300		E	P	J
7439-92-1	Lead	4060		E	P	J
7439-95-4	Magnesium	4590		E	P	J
7439-96-5	Manganese	1070		E	P	J
7439-97-6	Mercury				NR	
7440-02-0	Nickel	13.0		E	P	J
7440-09-7	Potassium	1220		E	P	J
7782-49-2	Selenium	14.8			P	
7440-22-4	Silver	24.7		E	P	J
7440-23-5	Sodium	323	J	E	P	80.5 J
7440-28-0	Thallium	4.0	U	N*	P	
7440-62-2	Vanadium	44.7			P	
7440-66-6	Zinc	8940		ED	P	J
57-12-5	Cyanide				NR	

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW Clarity After: _____ Artifacts: _____

Comments:

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CT 11/27/06

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1PR3

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1PR2

Matrix: (soil/water) SOIL Lab Sample ID: X4830-02

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 71.9

Concentration Units (**ug/L** or **mg/kg** dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	4770			P	
7440-36-0	Antimony	63.5		E	P	J
7440-38-2	Arsenic	55.7		E	P	J
7440-39-3	Barium	106			P	
7440-41-7	Beryllium	0.070	J		P	0.69 UJ
7440-43-9	Cadmium	14.8		E	P	J
7440-70-2	Calcium	8400		E	P	J
7440-47-3	Chromium	9.0			P	
7440-48-4	Cobalt	8.8		E	P	J
7440-50-8	Copper	111			P	
7439-89-6	Iron	18300		E	P	J
7439-92-1	Lead	1300		E	P	J
7439-95-4	Magnesium	3040		E	P	J
7439-96-5	Manganese	1250		E	P	J
7439-97-6	Mercury				NR	
7440-02-0	Nickel	5.6		E	P	J
7440-09-7	Potassium	891		E	P	J
7782-49-2	Selenium	4.9	U		P	UJ
7440-22-4	Silver	5.5		E	P	J+
7440-23-5	Sodium	292	J	E	P	695 UJ
7440-28-0	Thallium	3.5	U	N*	P	
7440-62-2	Vanadium	28.5			P	
7440-66-6	Zinc	2900		E	P	J
57-12-5	Cyanide				NR	

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW Clarity After: _____ Artifacts: _____

Comments:

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UJ 11/17/06

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1PR4

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1PR2

Matrix: (soil/water) SOIL Lab Sample ID: X4830-03

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 70.4

Concentration Units (**ug/L** or **mg/kg** dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	655			P	
7440-36-0	Antimony	233		E	P	J
7440-38-2	Arsenic	636		E	P	J
7440-39-3	Barium	95.6			P	
7440-41-7	Beryllium	0.12	J		P	0.71UJ
7440-43-9	Cadmium	46.9		E	P	J
7440-70-2	Calcium	23600		E	P	J
7440-47-3	Chromium	6.0			P	
7440-48-4	Cobalt	16.5		E	P	J
7440-50-8	Copper	303			P	
7439-89-6	Iron	186000		ED	P	J
7439-92-1	Lead	11700		E	P	J
7439-95-4	Magnesium	8150		E	P	J
7439-96-5	Manganese	1360		E	P	J
7439-97-6	Mercury				NR	
7440-02-0	Nickel	17.9		E	P	J
7440-09-7	Potassium	235	J	E	P	710UJ
7782-49-2	Selenium	63.3			P	
7440-22-4	Silver	44.0		E	P	J
7440-23-5	Sodium	235	J	E	P	710UJ
7440-28-0	Thallium	1.9	J	N*	P	J
7440-62-2	Vanadium	4.5	J		P	7.1U
7440-66-6	Zinc	6020		E	P	J
57-12-5	Cyanide				NR	

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW Clarity After: _____ Artifacts: _____

Comments:

C.T 11/27/06

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1PT5

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1PR2

Matrix: (soil/water) WATER Lab Sample ID: X4830-06

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 0.0

Concentration Units (**ug/L** or **mg/kg** dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	54.7	J		P	200 U
7440-36-0	Antimony	7.0	J		P	60.0 U
7440-38-2	Arsenic	10.0	U		P	
7440-39-3	Barium	28.9	J	E	P	200 UJ
7440-41-7	Beryllium	0.19	J		P	5.0 U
7440-43-9	Cadmium	1.1	J		P	
7440-70-2	Calcium	70800			P	
7440-47-3	Chromium	8.0	J		P	
7440-48-4	Cobalt	50.0	U		P	
7440-50-8	Copper	6.8	J		P	25.0 U
7439-89-6	Iron	204			P	
7439-92-1	Lead	21.5			P	U
7439-95-4	Magnesium	16900			P	
7439-96-5	Manganese	105			P	
7439-97-6	Mercury				NR	
7440-02-0	Nickel	2.5	J		P	
7440-09-7	Potassium	1460	J	E	P	5000 UJ
7782-49-2	Selenium	35.0	U	N	P	
7440-22-4	Silver	10.0	U		P	
7440-23-5	Sodium	31600			P	
7440-28-0	Thallium	25.0	U		P	
7440-62-2	Vanadium	50.0	U		P	
7440-66-6	Zinc	254		E	P	J
57-12-5	Cyanide				NR	

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

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J 11/27/06

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1PT6

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1PR2

Matrix: (soil/water) WATER Lab Sample ID: X4830-07

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 0.0

Concentration Units (**ug/L** or **mg/kg** dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	19.6	J		P	200U
7440-36-0	Antimony	14.4	J		P	60.0U
7440-38-2	Arsenic	5.7	J		P	10.0U
7440-39-3	Barium	56.2	J	E	P	200UJ
7440-41-7	Beryllium	0.14	J		P	5.0U
7440-43-9	Cadmium	0.53	J		P	
7440-70-2	Calcium	142000			P	
7440-47-3	Chromium	10.5			P	
7440-48-4	Cobalt	50.0	U		P	
7440-50-8	Copper	14.0	J		P	25.0U
7439-89-6	Iron	401			P	
7439-92-1	Lead	3.3	J		P	10.0U
7439-95-4	Magnesium	33700			P	
7439-96-5	Manganese	143			P	
7439-97-6	Mercury				NR	
7440-02-0	Nickel	6.1	J		P	
7440-09-7	Potassium	3140	J	E	P	5000UJ
7782-49-2	Selenium	35.0	U	N	P	
7440-22-4	Silver	10.0	U		P	
7440-23-5	Sodium	61400			P	
7440-28-0	Thallium	25.0	U		P	
7440-62-2	Vanadium	50.0	U		P	
7440-66-6	Zinc	389		E	P	J
57-12-5	Cyanide				NR	

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

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USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1PT7

Lab Name: CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1PR2

Matrix: (soil/water) WATER Lab Sample ID: X4830-08

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 0.0

Concentration Units (**ug/L** or **mg/kg** dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	31.0	J		P	200 U
7440-36-0	Antimony	14.6	J		P	60.0 U
7440-38-2	Arsenic	10.0	U		P	
7440-39-3	Barium	65.3	J	E	P	200 UJ
7440-41-7	Beryllium	0.11	J		P	5.0 U
7440-43-9	Cadmium	1.2	J		P	
7440-70-2	Calcium	152000			P	
7440-47-3	Chromium	13.4			P	
7440-48-4	Cobalt	50.0	U		P	
7440-50-8	Copper	9.6	J		P	25.0 U
7439-89-6	Iron	220			P	
7439-92-1	Lead	11.3			P	U
7439-95-4	Magnesium	37800			P	
7439-96-5	Manganese	120			P	
7439-97-6	Mercury				NR	
7440-02-0	Nickel	6.1	J		P	
7440-09-7	Potassium	3550	J	E	P	5000 UJ
7782-49-2	Selenium	35.0	U	N	P	
7440-22-4	Silver	10.0	U		P	
7440-23-5	Sodium	62800			P	
7440-28-0	Thallium	6.9	J		P	25.0 U
7440-62-2	Vanadium	50.0	U		P	
7440-66-6	Zinc	476		E	P	J
57-12-5	Cyanide				NR	

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

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USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1W55

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1PR2

Matrix: (soil/water) WATER Lab Sample ID: X4830-11

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 0.0

Concentration Units (**ug/L** or **mg/kg** dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	27.5	J		P	200 U
7440-36-0	Antimony	7.1	J		P	60 U
7440-38-2	Arsenic	10.0	U		P	
7440-39-3	Barium	49.3	J	E	P	200 J
7440-41-7	Beryllium	0.12	J		P	5.0 U
7440-43-9	Cadmium	5.0	U		P	
7440-70-2	Calcium	125000			P	
7440-47-3	Chromium	5.6	J		P	
7440-48-4	Cobalt	50.0	U		P	
7440-50-8	Copper	8.7	J		P	25.0 U
7439-89-6	Iron	54.0	J		P	100 U
7439-92-1	Lead	10.0	U		P	
7439-95-4	Magnesium	29700			P	
7439-96-5	Manganese	144			P	
7439-97-6	Mercury				NR	
7440-02-0	Nickel	4.6	J		P	
7440-09-7	Potassium	2750	J	E	P	5000 UJ
7782-49-2	Selenium	35.0	U	N	P	
7440-22-4	Silver	10.0	U		P	
7440-23-5	Sodium	54300			P	
7440-28-0	Thallium	25.0	U		P	
7440-62-2	Vanadium	50.0	U		P	
7440-66-6	Zinc	379		E	P	J
57-12-5	Cyanide				NR	

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

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USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1W56

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1PR2

Matrix: (soil/water) WATER Lab Sample ID: X4830-12

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 0.0

Concentration Units (**ug/L** or **mg/kg** dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	1470			P	
7440-36-0	Antimony	40.0	J		P	60.0 U
7440-38-2	Arsenic	31.5			P	U
7440-39-3	Barium	89.9	J	E	P	200 U J
7440-41-7	Beryllium	0.18	J		P	5.0 U
7440-43-9	Cadmium	10.8			P	
7440-70-2	Calcium	152000			P	
7440-47-3	Chromium	18.3			P	
7440-48-4	Cobalt	2.6	J		P	
7440-50-8	Copper	51.8			P	
7439-89-6	Iron	4180			P	
7439-92-1	Lead	581			P	
7439-95-4	Magnesium	34900			P	
7439-96-5	Manganese	992			P	
7439-97-6	Mercury				NR	
7440-02-0	Nickel	10.0	J		P	
7440-09-7	Potassium	3640	J	E	P	5000 U J
7782-49-2	Selenium	35.0	U	N	P	
7440-22-4	Silver	6.0	J		P	10.0 U
7440-23-5	Sodium	62900			P	
7440-28-0	Thallium	25.0	U		P	
7440-62-2	Vanadium	3.8	J		P	
7440-66-6	Zinc	1770		E	P	J
57-12-5	Cyanide				NR	

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

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USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH1W57

Lab Name CHEMTECH CONSULTING GROUP Contract: EPW06047

Lab Code: CHEM Case No.: 35810 NRAS No.: _____ SDG No.: MH1PR2

Matrix: (soil/water) WATER Lab Sample ID: X4830-13

Level: (low/med) LOW Date Received: 10/06/2006

% Solids: 0.0

Concentration Units (**ug/L** or **mg/kg** dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	31.2	J		P	200 U
7440-36-0	Antimony	13.9	J		P	60.0 U
7440-38-2	Arsenic	6.2	J		P	10.0 U
7440-39-3	Barium	65.6	J	E	P	200 UJ
7440-41-7	Beryllium	0.095	J		P	5.0 U
7440-43-9	Cadmium	0.95	J		P	
7440-70-2	Calcium	154000			P	
7440-47-3	Chromium	8.6	J		P	
7440-48-4	Cobalt	50.0	U		P	
7440-50-8	Copper	6.0	J		P	25.0 U
7439-89-6	Iron	157			P	
7439-92-1	Lead	3.7	J		P	10.0 U
7439-95-4	Magnesium	38200			P	
7439-96-5	Manganese	72.6			P	
7439-97-6	Mercury				NR	
7440-02-0	Nickel	4.7	J		P	
7440-09-7	Potassium	3610	J	E	P	5000 UJ
7782-49-2	Selenium	35.0	U	N	P	
7440-22-4	Silver	10.0	U		P	
7440-23-5	Sodium	64100			P	
7440-28-0	Thallium	25.0	U		P	
7440-62-2	Vanadium	0.64	J		P	
7440-66-6	Zinc	450		E	P	J
57-12-5	Cyanide				NR	

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

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JT 11/27/06